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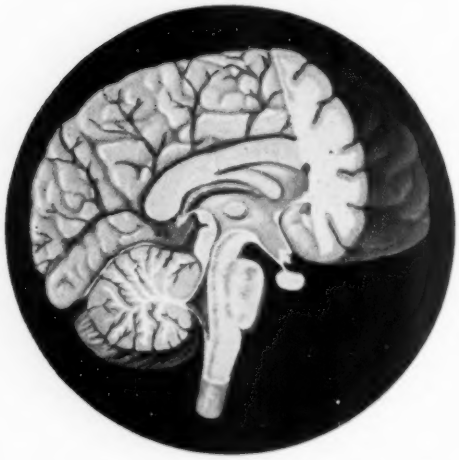

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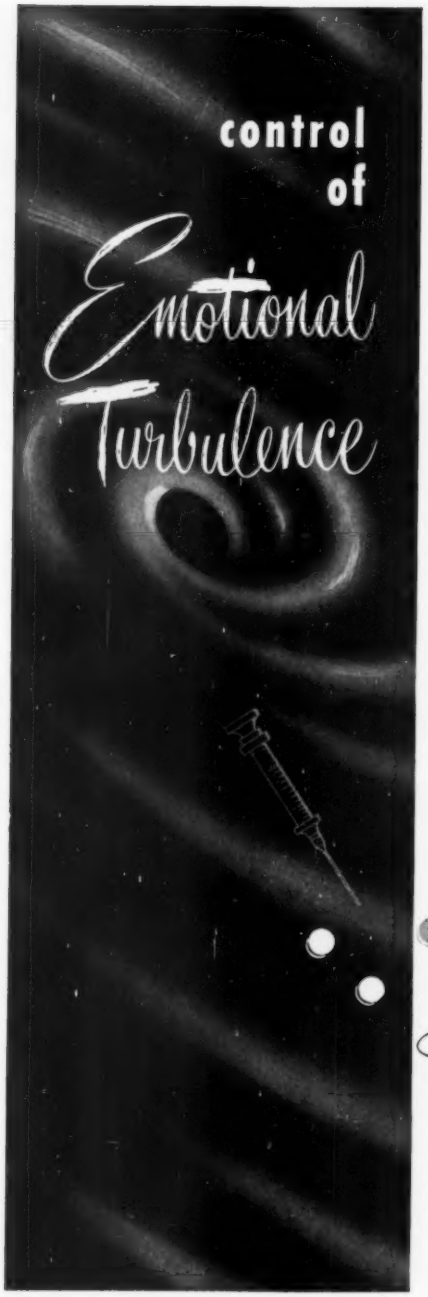

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WHAT ARE THE SIDE EFFECTS? Investigators have reported such symptoms as dizziness, nausea, weakness, drowsiness and epigastric distress in patients treated with Vesprin. Postural hypotension has been seen occasionally in normotensive patients. A hypotensive effect has been observed in patients with high blood pressure.
Anxiety and restlessness have been observed in some patients, and gain in weight in a few. These effects have usually been mild, and, as a rule have disappeared when the dosage was reduced or treatment stopped.
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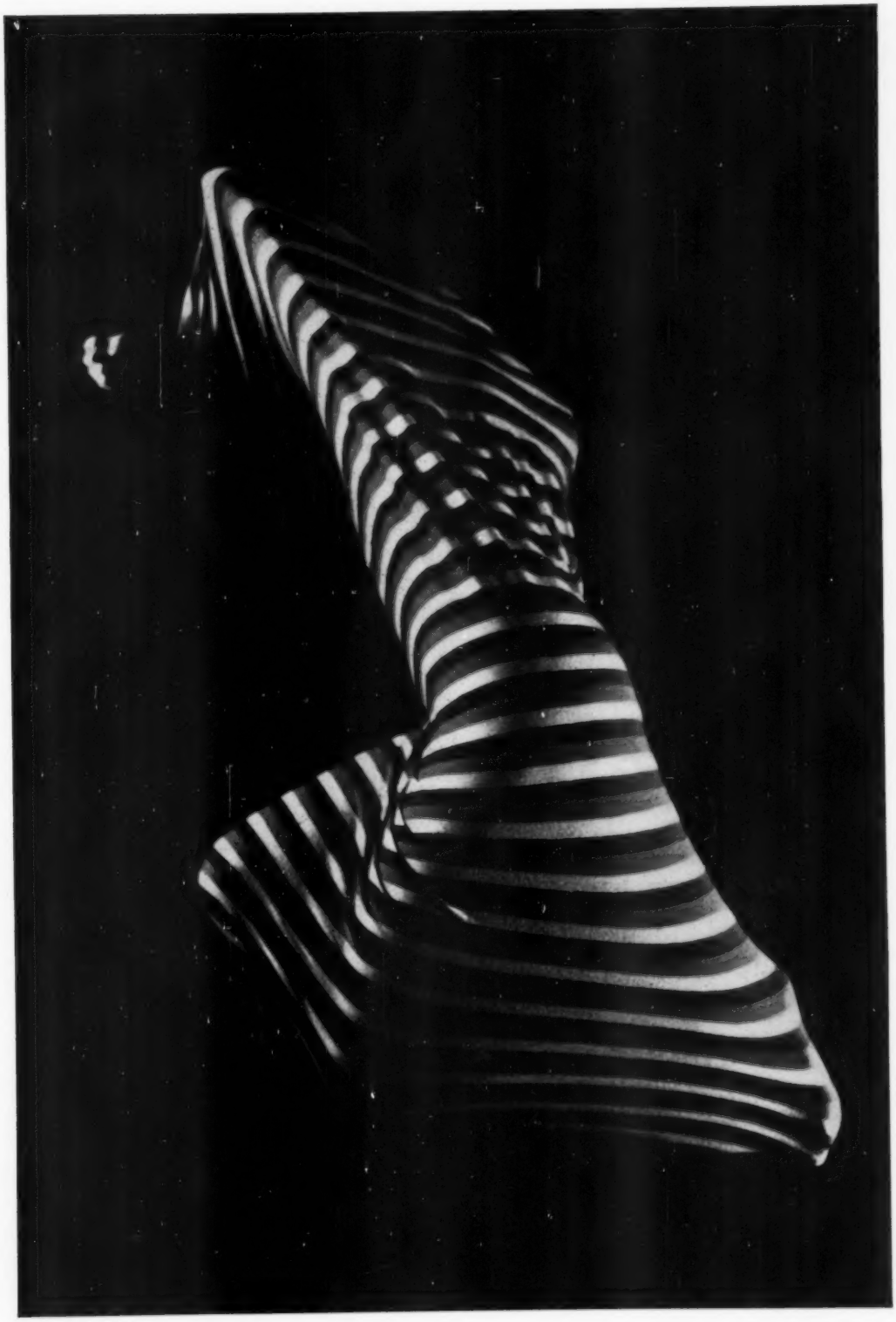

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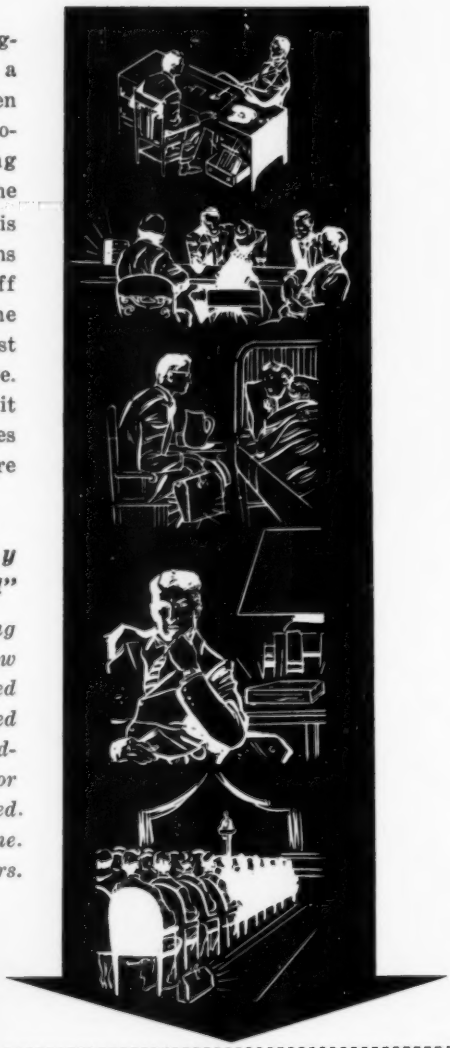

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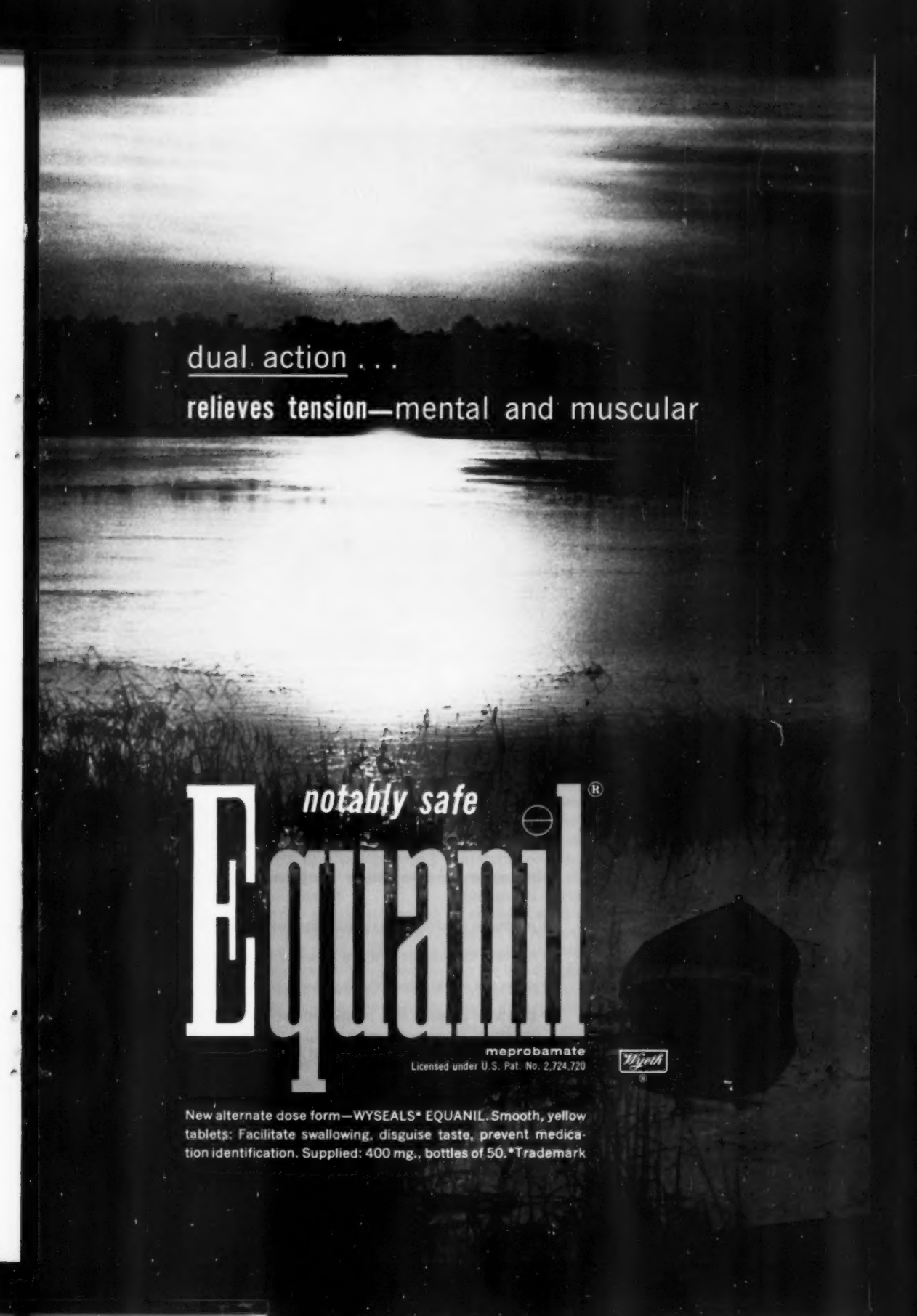
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PSYCHIATRIC NOSOLOGY: FROM HIPPOCRATES TO KRAEPELIN [1, 2]

ILZA VEITH, PH. D.[3]

Although the words *nosology, nosography,* and *psychiatry* are derived from Greek roots, they are of relatively recent origin; the Greeks themselves had neither a word for the healing of the mind nor for the description and classification of diseases. These concepts, however, were not lacking in Greek medical thinking. Mental illness had been known since the beginning of mankind and it was described and classified in the medical literature of antiquity. Psychiatric nosology is, therefore, an ancient pursuit, although it is commonly associated with the psychiatric movements of the 19th century.

For the most part both nosography and nomenclature of disease reflect at all times the current etiological concepts. The nomenclature of the Hippocratic writings reveals the Greek concept of disease origin, and it permitted an easy classification according to symptoms and the supposed etiology. It is the merit of the Hippocratic physicians that they sought the origin of mental disease within the patient or within his immediate surroundings, that they looked for natural causes and excluded superhuman influences from consideration. But, lacking precise notions of the structure and function of the human body and being prevented by taboo from the performance of dissection, they relied on a hypothetical schematic explanation of bodily function and dysfunction which was to them entirely satisfactory for the explanation of health and disease.

Hippocratic medicine, which influenced Western thinking until the 18th century, formalized the concept of the blending of 4 humors and their relationship to 4 major organs. From this were derived the terms—still part of present day vocabulary—phlegmatic, melancholic, choleric, and sanguine. While all 4 originally denoted states of humoral imbalance, melancholia alone was considered a type of insanity and was, in the Hippocratic writings, often equated with mania. Galen of Pergamon, of the 2nd century A. D., the most influential physician of antiquity, expanded this concept by defining melancholia specifically as caused by black bile operating on the rational faculty.

It was left to Celsus, the encyclopedist of ancient medicine, to organize Hippocratic disease concepts into a system whereby mental complications were classified into specific disease complexes and subdivided into acute and chronic states. While Celsus at times followed a topographic arrangement and did not adhere with complete rigidity to the division into acute and chronic diseases, his successors, Soranus (2nd century A. D.), and his Latin translator and commentator, Caelius Aurelianus (5th century A. D.), based their entire practice and teaching on this classification.

Although Soranus and Caelius Aurelianus continued in the Hippocratic tradition, they developed a new medico-philosophical system. The elements which they retained are largely expressed in their description of the nature of different mental diseases. Thus melancholia remained related to black bile; hysteria continued to be attributed to disorders of the uterus, and was, therefore, a disease of women only. Phrenitis was a feverish disease related, as its name indicates, to the diaphragm (*phren*) but affecting that part of the mind that was held to be lodged in the diaphragm. From the same Greek root that gives us the phrenic nerve, we derive the term frenzy, also related to the part of the mind housed in the diaphragm. Hypochondriasis, which was a condition similar to phrenitis, was attributed to the hypochondrium, as hysteria was attributed to the uterus.

But whereas the Hippocratic writings regarded these conditions as the results of hu-

[1] Read at the 113th annual meeting of The American Psychiatric Association, Chicago, Ill., May 13-17, 1957.

[2] Supported by a grant from the U. S. Public Health Service, National Inst. of Mental Health.

[3] Associate Professor of the History of Medicine, Department of Medicine, University of Chicago, Chicago, Ill.

moral imbalance, Soranus and Caelius Aurelianus believed in a pathology of solids which assumed that minute solid particles, called atoms, moved throughout the body, and maintained health by their constant flow. From this they developed an elaborate scheme of opposing constrictions and relaxations, which called for the application of opposing forces as therapy. Many traces of these concepts can still be found in the writings of Cullen, Brown, and Benjamin Rush, and the word neurasthenia is a direct expression of the concept of pathological relaxation.

These concepts appeared in a book, *On Acute and on Chronic Diseases*[4] which was written by Soranus and later translated into Latin and expanded by Caelius Aurelianus. It deals extensively with diseases involving the mind. The following afflictions are listed as of an acute nature: phrenitis, lethargy, stupor or katalepsy, apoplexy, hydrophobia, and satyriasis. Except for phrenitis, all these diseases are attributed to stricture and are treated accordingly with relaxing remedies and manipulations. Among the chronic diseases listed we find headache, incubus, epilepsy, melancholia, nocturnal emissions, priapism, and—significantly—homosexuality. Except for nocturnal emissions and headache, all chronic diseases of the mind are attributed to stricture, although melancholia (like phrenitis) could result from either stricture or looseness. Homosexuality alone is exempted from any classification, for it is considered a direct "affliction of a diseased mind" rather than a mental result of a physical state.[5]

Mania and melancholia are described largely as diseases of the male sex while mental derangement in women appears to come under hysteria or hysterical suffocation which, however, receives but cursory mention in Soranus' writings. The therapy of all chronic diseases due to stricture is similar and extremely permissive.

> As for the treatment . . . to begin with, have the patient lie in a moderately light and warm room. The room should be perfectly quiet, unadorned by paintings, not lighted by low windows, and on the ground floor rather than on the upper stories, for victims of mania have often jumped out of windows. And the bed . . . should face away from the entrance to the room so that the patient will not see those who enter. In this way the danger of exciting and aggravating his madness by letting him see many different faces will be avoided.
>
> Do not permit many people, especially strangers, to enter the room. And instruct the servants to correct the patient's aberrations while giving them a sympathetic hearing. That is, have the servants, on the one hand, avoid the mistake of agreeing with everything the patient says, corroborating all his fantasies, and thus increasing his mania; and, on the other hand, have them avoid the mistake of objecting to everything he says and thus aggravating the severity of the attack. Let them rather at times lead the patient on by yielding to him and agreeing with him, and at other times indirectly correct his illusions by pointing out the truth. And if the patient begins to get out of bed and cannot easily be restrained, or is distressed especially because of loneliness, use a large number of servants and have them covertly restrain him by massaging his limbs; in this way they will avoid upsetting him.
>
> If the patient is excited when he sees people, bind him without doing any injury. Now if there is a person whom the patient has customarily feared or respected, he should not be brought into the sickroom repeatedly. For this frequent repetition gives rise to a lack of regard. But when circumstances require it, as when the patient does not submit to the application of a remedy, this person should then be brought in to overcome the patient's stubbornness, by inspiring fear or respect.[6]

In citing the views of Soranus and Caelius Aurelianus *in extenso* I have tried to describe the classificatory system that obtained for centuries to come. Aretaeus of Cappadocia, who also wrote on the causes and symptoms of chronic and acute diseases, Oribasius, Paulus of Aegina, even the Arabic writers Rhazes and Avicenna reiterated the views of their predecessors with minor variations rather than evolving new ones. The reawakened interest in classical writings during the late Middle Ages and the early Renaissance brought about a return to the humoral concept of disease, with a concomitant random application of phlebotomy.

[4] Caelius Aurelianus. On Acute Diseases and on Chronic Diseases. Ed. and translated by I. E. Drabkin. Chicago, 1950.

[5] *Ibid.*, pp. 901-905. This extraordinary account of male and female homosexuality appears to be the only one in the medical literature of antiquity. Whether the fact that it is listed as a chronic disease coming "from a corrupt and debased mind" is a reflection of a general changing attitude towards homosexuality merits special investigation. It may also express the author's personal point of view and would go well with his annoyance at mothers who refused to nurse their babies so as not to ruin their figures and his condemnation of those who gave abortive remedies to cover up illegitimacy or marital infidelity.

[6] *Ibid.*, p. 543.

The most notable advance in psychiatry, as well as in medicine in general, was made in the 16th century with the trend toward correlating disease and bodily structure. The earliest exponent of this anatomical approach was Jean Fernel (1497-1588),[7] who was professor of medicine in Paris and the first to employ the word physiology[8] in the modern sense, denoting function of the human body. His main interest, however, lay in the field of pathology, a term which was coined by him and which, as he conceived of it, "... was a systematic essay on morbidity, pursued unhaltingly through the body, organ by organ."[9]

In this pursuit he arrived at a classification which divided diseases into general and special types. The latter were subdivided into 1. those involving the parts above the diaphragm; 2. those affecting the parts below the diaphragm; and 3. external diseases. As a further subdivision of special diseases Fernel arranged them into, (a) simple types, which are confined to a part of a single organ; (b) compound types, involving the entire organ; and (c) complex types, which were diseases that affected several organs and their interrelationship. When we consider the traditional physical explanation of hysteria as the result of a migrating uterus, of melancholia as related to the spleen, of hypochondriasis as originating in the region below the costal arch and of phrenitis as being located in the diaphragm, we realize how applicable Fernel's topographic classification was to psychiatry.

The typographic plan as laid out by Fernel guided the nosographic efforts into the 17th century. By the middle of that century, however, it was replaced by a new system, devised by Felix Platter (1536-1614) of Switzerland, which was based on symptomatology. Pain was considered one of the chief symptoms and indeed came to occupy the position of an important clinical entity.[10] The writings of Platter and his followers also dealt with various "psychiatric" states, including headache, auditory disturbances, tremors, and herpes[11]; for the last-named was considered to be related to epilepsy and syncope.[12] The writings of the neuropsychiatrists of the later 17th century reveal that they were engaged in a gigantic effort to construct a nosologic edifice composed of irreducible and constant units. They hoped that close observation would reveal these units to represent different diseases. To these nosographers illness was a static condition built of constant and easily recognizable entities. They did not realize the protean quality of disease, its dynamic behavior which depends on many constantly changing factors.

The implicit assumption of disease as a thing in itself unrelated to the patient, the patient's personality, bodily constitution and mode of life was shattered by the great English clinician, Thomas Sydenham (1624-1689). He studied the manifestations of diseases in the individual patients and proclaimed the need for a sharp separation between those symptoms that are always present in certain diseases and those that occur only infrequently. By correlating the constantly occurring symptoms with the history of the individual patient, and recognizing the similarity of the manifestations of certain diseases, Sydenham established a basic relationship between these states. One of the most striking examples was that of the identity of hysteria and hypochondriasis.

> Of all chronic diseases hysteria—unless I err—is the commonest; since just as fevers—taken with their accompaniments—equal two thirds of the number of all chronic diseases taken together, so do hysterical complaints (or complaints so called) make one half of the remaining third. As to females, if we except those who lead a hard and hardy life, there is rarely one who is wholly free from them—and females, be it remembered, form one half of the adults of the world. Then, again, such male subjects as lead a sedentary or studious life, and grow pale over their books and papers, are similarly afflicted, since, however, much, antiquity may have laid the blame of hysteria upon the uterus, hypochondriasis (which we impute to some obstruction of the spleen or viscera) is as like it, as one egg is to another. True, indeed, it is that

[7] Pathologia, (Frankfurt, 1592), and Medicina, (Paris, 1554).

[8] The word itself had first been used by Aristotle in De sensu et Sensili, IV, 24.

[9] Sir Charles Sherrington. The Endeavour of Jean Fernel, Cambridge, 1946.

[10] Praxeas medicae, Basel, 1602 and Tractatus de doloribus, Basel, 1603.

[11] Georg Wolfgang Wedel, Dissertatio de herpete, Jena, 1703.

[12] Günther Schelhammer. Dissertatio de obsessis, Kiel, 1704 and Dissertatio de morbis magicis, Kiel, 1704.

women are more subject than males. This, however, is not on account of the uterus, but for reasons which will be seen in the sequel.[13]

Sydenham's perspicacity in equating hysteria with hypochondriasis becomes all the more impressive in view of his pointing out that,

. . . it is necessary that all diseases be reduced to definite and certain *species* . . . since it happens, at present, that many diseases, although included in the same genus, mentioned with a common nomenclature, and resembling one another in several symptoms, are notwithstanding, different in their natures, and require a different medical treatment.[14]

For this reason he felt that in describing the history of a disease, every philosophical hypothesis previously held by the author, should lie in abeyance so that he can realize that,

Nature in the production of disease, is uniform and consistent; so much so, that for the same disease in different persons the symptoms are for the most part the same; and the self-same phenomena that you would observe in the sickness of a Socrates you would observe in the sickness of a simpleton.[15]

In his desire to evolve a scientific nosography, Sydenham was motivated by the conviction that it was possible to draw up a complete picture of each disease, just as a violet could be described so that this description would be true for all the violets of that particular species all over the world. Although Sydenham indicated the method to be followed, his first successor did not appear until the middle of the 18th century. It was Francois Boissier de Sauvages (1706-1767) of Montpellier, a botanist and a physician,[16] who grouped diseases in classes, orders and genera in the same way the contemporary natural scientists arranged systems of plants and animals. Apart from the plan itself which was modeled after Sydenham's pattern, Sauvages' nosology fell far short of Sydenhams' nosographic ideal. Because anatomical changes and the causes of disease were generally unknown, Sauvages based his classification on symptoms which he saw as just so many different diseases. Consequently his nosology, grouped under 10 classes, 40 orders and 78 genera contains no less than 2,400 different diseases. To his contemporaries, Sauvages' work was tremendously impressive and it was widely emulated. Carl Linné's *Genera Morborum* (1763), is frankly patterned after Sauvages' work.

It is obvious that neither Sauvages nor Linné had attained Sydenham's skill in differentiating symptoms from disease. Such skill could not be attained by theoretical speculations but only through the close and continuous association with patients. It was Philippe Pinel (1745-1826) the great French psychiatrist, who combined a broad intellectual background with sufficient clinical experience to arrive at a workable psychiatric nosography.[17] As physician-in-charge at the Bicêtre and the Salpêtrière he had spent years in the systematic observation of his patients and watched them carefully through all phases of their illness. As a pupil of Sauvages he was familiar with the nosological efforts of his day, including those of Linné and the Englishman, William Cullen. Pinel's nosography reflects the sources of his reading but even more the purposefulness of his own disease classification and his prolonged acquaintance with mental disease.

Pinel is best known for having freed the insane from their chains, but beyond that he endeavored to help them recover sufficiently so that they could leave the hospital. In order to institute effective treatment he felt the patients would have to be classified and segregated according to the nature of their particular disease. At the Bicêtre he separated the agitated from the quiet cases; but when he became head of the Salpêtrière his differentiation became more detailed and he divided the inmates into maniacs, melancholics, dements and idiots. Pinel's interest in psychiatric diseases included a profound concern for his patients' physical health. And in psychiatry as well as in general medicine he realized a symptomatic arrangement of diseases was no longer in accord with the progress of French medicine, which was expanding into a school of anatomical diagnosis.

[13] The Works of Thomas Sydenham, M. D. translated by R. G. Latham, Vol. II, London, p. 85, 1848. See also: Ilza Veith: "On Hysterical and Hypochondriacal Afflictions" Bull. Hist. Med., 30: No. 3, 1956.

[14] The Works of Thomas Sydenham, M. D., Vol. I, p. 13.

[15] *Ibid.*, p. 15.

[16] Traité des classes des maladies, 1731; and Nosologia methodica sistens morborum classes, genera et species, 1763.

[17] Nosographie philosophique, ou la méthode de l'analyse appliquée à la médecine, Paris, 1798.

Like Sydenham before him, Pinel strove in his *"nosographie"* to determine the common elements in different cases of the same disease.

In contrast to the thousands of diseases established by his predecessors, Pinel's classification appears to be almost an oversimplification. Yet his assertions were always based on observations, his conclusions were derived without physiological fiction and the psychopathology created by him was entirely devoid of metaphysical hypotheses. Pinel's chapter on the "Mental Derangements Distributed into Different Species" is a masterpiece of clarity and simplicity.[18] After a general opening statement there follows a detailed description of each of his 5 forms of insanity: mania, melancholia—the latter being divided into two species, depending on existence or absence of delirium—dementia, and idiotism. The following concise summaries conclude each section:

Specific Character of Melancholia. Delirium exclusively upon one subject: no propensity to acts of violence, independent of such as may be impressed by a predominant and chimerical idea: free exercise in other respects of all the faculties of the understanding: in some cases, equanimity of disposition, or a state of unruffled satisfaction: in others, habitual depression and anxiety, and frequently a moroseness of character amounting even to the most decided misanthropy, and sometimes to an invincible disgust with life.[19]

Specific Character of Mania Without Delirium. It may be either continued or intermittent. No sensible change in the functions of the understanding; but perversion of the active faculties, marked by abstract and sanguinary fury, with a blind propensity to acts of violence.[20]

Specific Character of Mania With Delirium. Mania with delirium is either continued or intermittent, with regular or irregular returns of the paroxysms. It is distinguished, both in respect to the functions of the mind as well as those of the body, by a strong nervous excitement; and marked by the lesion of one or more of the functions of the understanding, accompanied by emotions of gaiety, of despondence or of fury.[21]

Specific Character of Dementia. Rapid succession or uninterrupted alternation of insulated ideas, and evanescent and unconnected emotions. Continually repeated acts of extravagance: complete forgetfulness of every previous state: diminished sensibility to external impressions: abolition of the faculty of judgment: perpetual activity.[22]

Specific Character of Ideotism. Total or partial obliteration of the intellectual powers and affections: universal torpor: detached, half articulated sounds; or entire absence of speech from want of ideas: in some cases, transient and unmeaning gusts of passion.[23]

In spite of his clear-cut divisions into species, Pinel was fully aware of the possibility of the co-existence of two diseases, such as, "Insanity complicated with epilepsy," cretinism in idiocy, or the degeneration of melancholia into mania. And he concluded that,

Insanity does not in general preserve the same character throughout the whole of life. The different species are mutually interchangeable. Melancholia is not unfrequently exasperated into mania. Mania is depressed into ideotism; and ideotism is in its turn exalted to mania, as a first step towards the recovery of reason.[24]

From the foregoing quotations it is evident that Pinel's great contribution to psychiatric nosography was his ability to observe and to glean from his observations the basic principles of mental disease. That his reaction to Boissier de Sauvages' superabundance of diseases led Pinel to an over-simplified nosography was inevitable; it was also inevitable that his followers rectified some of these over-simplifications. Among these, Pinel's major disciple, Jean-Etienne-Dominique Esquirol deserves special mention. His brilliant lectures attracted and molded many of the excellent French psychiatrists of the 19th century. Like his teacher, Esquirol was preoccupied with the improvement of psychiatric treatment, and like his teacher he observed avoiding speculation and philosophical digressions. He enriched nosography by his description of monomania and by a better definition of idiocy, which he summed up by saying, "The condition of a mentally diseased person may change, that of an idiot never." [25]

The Salpêtrière, the source of Pinel's and Esquirol's extensive patient material was also the scene of activity of France's most famous neuropsychiatrist. Jean-Martin Charcot (1825-1893) never thought of himself as a nosographer, although Freud reported about

[18] Ph. Pinel. A Treatise on Insanity, Sheffield, 1806 pp. 34-36.
[19] *Ibid.*, p. 149.
[20] *Ibid.*, p. 156.
[21] *Ibid.*, p. 159.
[22] *Ibid.*, p. 164.
[23] *Ibid.*, p. 172.
[24] *Ibid.*, pp. 172-173.
[25] On Mental Diseases, 1838, Vol. II, pp. 284-86.

Charcot's plan to create a valid nomenclature and of his pride in his nosographic efforts. And, indeed, *la méthode nosologique ou nosographique*, as Charcot himself described his neurological methods, was extremely successful for he combined explicitly the Hippocratic attention to minute clinical data with those furnished by pathological anatomy and histology and by physical experiment. In so doing he said modestly,

> We sometimes succeed in reaching a conception of certain morbid states which is really rational and almost complete.[26] The object of pathological anatomy, he felt, was "mainly that of enriching nosography by new light, permitting the distinction of diseases whose symptomatic resemblance might have been confounded." [27]

Similarly, he recognized that histopathology into which he also included histochemistry furnished, "new means of diagnosis and nosographic characters." [28] But above all he valued,

> a general kind of observation, more familiar perhaps to the ancients, which does not limit itself to an examination of isolated phenomena, but which regards them on the contrary in their mutual bearings, in their order of succession; in short, as Nature presents them to him who can get a bird's-eye view of things.

Charcot recognized,

> that each disease has an evolution of its own, a special mode of development, a particular grouping of symptoms, which allow us to describe it according to a common type, in spite of the variability of accessory circumstances. Thence arose the notion of morbid unities or species, a notion perfectly exact, since it corresponds to a fact of experience, but the meaning of which became singularly altered when people went so far as to consider diseases as concrete beings like individuals, and on the same footing as animals or plants.

Charcot further saw,

> that sometimes the disease goes rapidly through its successive periods to reach its natural termination; while sometimes, on the contrary, it requires a long space of time to pass through the different phases of its evolution. Thence comes the distinction established between acute maladies and chronic affections.

However, this "must not be regarded as an absolute line of demarcation, since the acute and the chronic form of one and the same pathological state merge into one another by insensible transitions." Like Pinel, Charcot observed that different morbid states may coexist or succeed one another in the same individual or family according to a determined order and certain laws; and he concluded, "that these affections are not isolated, but are dependent on a common cause which serves as a link between them."

Charcot felt that hypothesis always serves to give substance to the unknown cause. According to the taste of the period, the etiological factors are seen in an influence of the nervous system, a modification of the crasis of the humours, or the presence of morbific matter in the blood.[29] Charcot frequently expressed his indebtedness to the work of Bichat, Broussais, Claude Bernard, Magendie, and the other great French fundamental scientists of the 19th century—he also admitted freely the tremendous advances of the Germans who had added morbid histology to the sciences that were fundamental to the study of neurology. The application of these fundamental sciences to the study of mental disease resulted in marked advances in neurology, which was not clearly differentiated from psychiatry. The search for a somatic basis for mental symptoms entered into research and gave it direction. And when the bacteriologists demonstrated the existence of physical causes as responsible for physical lesions, new vistas were opened for diagnosis, prevention, and even cure. The results of the somatic approach to psychopathology were considerable: the infectious origin of paresis coupled with the knowledge of the somatic changes in diseases of senility opened up a considerable part of mental disease to rational explanation.

But even those mental diseases that defied immediate explanation and, for that matter, all mental phenomena, came under the study of the fundamental scientists. German psychology emerged from the fetters of the philosophy of Romanticism and became an objective, experimental discipline. In 1878 this change was formalized to the extent that

[26] J. M. Charcot. Clinical Lectures on Senile and Chronic Diseases, translated by William S. Tuke, London, 1881, p. 19.
[27] *Ibid.*, p. 13.
[28] *Ibid.*, p. 15.
[29] *Ibid.*, p. 10.

Wilhelm Wundt was able to establish an Institute for Experimental Psychology at the University of Leipzig.

Most of Wundt's students followed their teacher's inclination and specialized mainly in the field of experimental psychology. Emil Kraepelin, however, Wundt's most prominent student, applied experimental psychology to the practice of medicine and particularly to the investigation of psychopathology.

From his study of the milder types of mental aberrations, which he even produced experimentally in his own students, Kraepelin proceeded to investigate the more serious mental disturbances. Here he turned to the minute observation of a tremendous number of patients, to which he added a close study of the history of each patient's life and of all demonstrable changes in the patient's behavior. The last method convinced him that the same patient can go through alternate stages of elation and depression and that both stages were typical of manic-depressive psychosis rather than of 2 distinct diseases.

The vast number of clinical observations of patients and the collection of their histories convinced Kraepelin that the principle requisite in the knowledge of mental disease was an accurate definition of the separate disease processes and the search for disease entities.[80] This was the task he carried out in his textbook which grew from a small *"Compendium"* (1883) to a 2 volume *Lehrbuch* of 2,425 pages in its 9th edition in 1927.

In reading this textbook we are at once reminded of the classification of the Graeco-Roman authors with their primary division into acute and chronic disease. Kraepelin's primary division classified the major psychoses into exogenous and endogenous diseases. All further reasoning concerning these psychoses depended on the basic classification. Thus, those diseases which were caused by external conditions were curable while the internally conditioned diseases were held to be incurable. His 2 major groups of mental diseases, the manic-depressive psychoses and dementia praecox were also subordinated to this classification. The latter included catatonia, which Kahlbaum had described as a separate manifestation.

According to the 7th edition of Kraepelin's *Lehrbuch,* manic-depressive insanity is characterized by alternating attacks of elation and depression with occasional intervals of a "mixed phase." Temporary recovery and normal intervals are common. Dementia praecox, however, was held to be incurable and was described to comprise a large group of disturbances starting early in life which have in common a tendency to mental deterioration. Although Kraepelin is perhaps most famous for his description of those diseases which are now known as schizophrenia and manic-depressive psychoses, he was actually concerned with the entire field of psychiatry and his system as it appeared in the 9th and posthumous edition of his *Lehrbuch* classified mental diseases into 18 groups.[81]

In its practical application Kraepelin's nosography led to an overemphasis of classification with a relative neglect of therapy. Yet in other respects Kraepelin's system was immensely important since it defined the discipline of psychiatry as distinct from neurology and at the same time returned mental disease to the general field of medicine. Like the physicians of antiquity whose systems had encompassed mental disturbances, Kraepelin believed that mental disease was basically due to the same causes as any other disease. In detail Kraepelin's nosography was the outgrowth and synthesis of the ideas of the 19th century—in its larger aspect it was the final confirmation of the Hippocratic postulate that there is no single "sacred disease" but that all diseases are equally sacred or equally natural.

[80] Clinical Psychiatry, abstracted and adapted from the Seventh German edition of Kraepelin: Lehrbuch der Psychiatry, by A. Ross Dieffendorf. New York, 1923.

[81] For a more detailed treatment of the Kraepelinian system see A History of Medical Psychology by Gregory Zilboorg (New York, 1941).

THE THREAT OF CLARITY [1, 2]

GARRETT HARDIN, PH. D.[3]

He who speaks in favor of unclarity raises a justifiable suspicion that he merely seeks to attract attention; or worse, that he is promoting a subtle form of anti-intellectualism. To be accused of either is a serious matter, but every now and then, I think, someone must run the risk in hope of sensitizing us once more to the ever-present dangers of language. Language should periodically be put on trial, and when it is, even its accepted virtues, *e.g.*, clarity, must be doubted. Those who judge must listen to a devil's advocate. This is the role I play here in pointing out the dangers of clarity—or, if you wish, of "clarity."

Language subserves two functions: communication and thinking. As regards the first, it is perhaps not possible usefully to doubt the desirability of clarity. Of course, there is the superficial unclarity of tact, of poetry and parable, and of the replies of a skilled psychiatrist—but all these art-forms can, from a more profound standpoint, be defended as real (though subtle) kinds of clarity in communication.

It is only when we come to consider language in its role *in thinking* that we begin to see a sense in which it is doubtful if clarity is always desirable. Ours is a language-limited world. We not only speak our language: we think in it, as a fish lives in water. For the most part we see the world as our language tells us to. Each of the many languages has its peculiar limitations which shut out certain aspects or views of reality to those who speak but one language. He who "masters" but one language may thereby be mastered by it. To be completely "at home" in a language is to be structured to fit one particular and limited world of thought.

A few simple examples of the coupling of words to perception may be useful. Eskimos (1) have separate words for falling-snow, snow-on-the-ground, wind-driven-snow, snow-packed-into-ice, etc; we make do with one word—*snow*. Half a world away, Argentine gauchos(2) have names to distinguish some 200 different color-patterns in horses. The reason for diversity is obvious in both cases: interest dictated by culture. But distinctions, once made, "feed back" into the mind and cause it to perceive as much or as little variety in the world as language has words for. The gaucho who distinguishes 200 colors of horses lumps the vegetable world into 4 "species": *pasto* or fodder, *paja* or bedding straw, *cardo* or woody material; and *yuyos* for all other plants, including lilies, roses and cabbages. (The class of *yuyos* reminds us of the grab-bag group *Chaos*, which Linnaeus, the father of taxonomy, resorted to when he despaired of completing his analysis of the living world.) It would be going too far to say that the gauchos can see only 4 kinds of plants, but undoubtedly their perceptual world is impoverished by their linguistic one. Experimental evidence for this principle has been obtained by Lenneberg(3) who has found that an English-speaking person can, in a non-verbal test, more easily identify those colors that have recognized names in English than he can the distinguishable hues that have no names.

Cautiously interpreted, the language of another people is a clue to their psychology. Rabbi Blau(4) has remarked how curious it is

> that the Hebrew language, though impoverished in many respects has preserved [in Leviticus xxi and in both *Tochechoth*] so many words that describe unsightly malformations and loathsome diseases. We lack classic Hebrew terms for many of the beautiful sights and sounds of this world—for colors, flowers, trees, birds—but we do not seem to be wanting in terms that bring before us the seamy side of life, that echo the groans of the sufferers, that reflect the gloom of darkened lives. One is reminded of those old-fashioned books on theology that contained nine chapters on hell and only one chapter on heaven.

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[1] Read at the 113th annual meeting of The American Psychiatric Association, Chicago, Ill., May 13-17, 1957.

[2] I wish to express my profound thanks to Zigmond M. Lebensohn for sympathetically initiating this paper, and for his many kindnesses. I am also greatly indebted to Herbert Fingarette, Douwe Stuurman, and Lewis Walton for their searching criticisms of the early drafts.

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There are many chances for error, of course, in deducing a people's psychology from their language, as is suggested by the following puzzle. The two Greek words *chloros* and *achros* both have dictionary translations of "yellow." But usage(5) indicates that the former sometimes means yellowish green, sometimes grayish brown; and the latter sometimes means greenish yellow, and at other times red (of all things). What's going on here? It is hard to believe that the words refer only to color, but attempts to include intensity or luster in their meanings have only made the snarl worse. In desperation, one linguist has suggested that all the old Greeks must have been color-blind!

Does perception produce language, or language produce perception? This question is clearly in a class with "Which came first, the chicken or the egg?" and there is no need to take sides. Whatever the origin of linguistic distinctions, once made they are part of a cybernetic system(6) of mutual support of language and perception. Call it a vicious circle, if you will. But it is not unbreakable: new cultural demands may force a finer analysis. Thus, in our own part of the world, we observe ski enthusiasts enlarging the language about snow to make it as finely discriminating as the Eskimos'. Regarding objective things like snow and horses and trees we need not concern ourselves overmuch with the limitations of a particular vocabulary, for it will enlarge when there is a cultural need for it to do so.

It is words of another sort that give us trouble—the words that stand for large classes of things, or for abstractions or difficult concepts. Here the coupling of word and reality is often excruciatingly *loose*. "What is intelligence?" "What is the cause of insanity?" "How can we control the unconscious?" Who has not winced at such questions? How can one possibly answer them? Yet, grammatically speaking, they look so simple, so clear! What is wrong?

The simplest objection to them is that each key word covers a confused multitude of concepts or things. Intelligence, for example, is a grab-bag term including at least 4—and possibly 9 or more—different abilities(7). "The unconscious" is capable of at least 16 different interpretations(8). And "insanity"—who is so mad as to attempt to catalog its complexity? But the real problem posed by such words is far deeper than appears at first.

It must not be supposed that an attempt to find out what is behind such "big" words as "intelligence" and the "unconscious" will be warmly welcomed. These words, besides having the support of a long tradition, play an important role in the sociology of knowledge: they stop inquiry where it is most painful and difficult (and, it must be admitted, most likely to fail). When we say that "Intelligence solves our problems," or "The mind resists change," we think we have explained something. But an honest examination convinces us that we have "explained" only by resort to words whose meaning is so vague that they can "explain" almost anything. A word which acts as an explain-all has been called(9) a *panchreston*, a word coined on the analogy of panacea, a cure-all. The history of human thought is littered with discarded panchresta: the many personal and omnipotent gods, the soul, and the "humours" of medieval medicine, for example. Bergson created an *élan vital* to explain the properties of living things; Driesch conceived an *entelechy* to explain the mysteries of embryology. "Mind," "instinct," and "love," though they may have defensible denotations, are certainly often used panchrestically. The literature of psychoanalysis is riddled with explain-alls: a single (and by no means exceptional) quotation(10) should suffice: "The ego becomes suspicious: it proceeds to invade the territory of the id."

If the physiology of language is to promote communication and thinking, the inhibition of these functions may be regarded as part of language's pathology. Always, of course, in a deep sense, pathology is as "normal" as the normal physiology in which it has its roots. "Every language," said the linguist Benjamin Lee Whorf(11) "incorporates certain points of view and certain patterned resistances to widely divergent points of view," and it is these points of view that determine both the strengths and the weaknesses of each language. As in so much of biology, discovery is greatly aided by comparative study. Experience has shown that

the comparison of Indo-European languages among themselves has yielded only modest increments of knowledge: the greatest gain has been made when our languages have been compared with strikingly different tongues, for example with the many Indian dialects of North America, a program of study in which Sapir(12) and Whorf have been leaders.

The comparative study of 2 languages should throw as much light on the strengths and weaknesses of one as on the other—if carried out by a really neutral observer. In fact, however, the very few observers who have been equipped for this difficult work have been Indo-Europeans, and the most they have been able to do is lay bare the structure of *our* kind of language, using the exotic language as a probe. The reciprocal knowledge, desirable as it would be to have, is scarcely available. It is for this reason that only the characteristic weaknesses of Indo-European will be pointed out in the paragraphs to follow. The one-sided presentation does not stem from a Rousseau-like belief in the "noble savage." The savage has his troubles, too, but we should consider ourselves lucky enough if we come to understand our own.

We can begin with a very simple example, the analysis of which shows that our language is more mysterious than we ordinarily realize. Consider the declarative sentence, *"It rains."* What is the *it* that rains? Well, *rain* rains . . . but that is an odd sentence, isn't it? "Rain" must be the implied antecedent of "it," but we never, in ordinary conversation, say "Rain rains"; always we assert the predicate of some vague and unspecified subject "it." We also say "It thunders," and we may say "it lightnings." Why? As Whorf has pointed out, we are compelled to make such sentences because of an over-riding metaphysical assumption of the Indo-European languages that everything in the world has 2 poles—an actor pole and an action pole, and that one cannot exist without the other, any more than a magnet can have a north pole only. The actor we represent by the subject of the sentence; the action by the verb. Always there must be both, so when we have trouble finding the actor for such processes as raining, thundering, and flashing (of lightning) we invent a subject called "it" to stand as actor. We would feel uneasy just saying "Rains!" or "Thunders!" or "Flashes!"

Other peoples feel otherwise. Hopi Indians, confronted with the same objective realities, use only the verbs without subjects, and feel quite secure. The metaphysic of their language is different and permits—even insists—that they use verbs-without-subjects to represent the events we denote by the nouns *lightning, wave, flame, meteor, puff of smoke,* and *pulsation.* The decision to invoke the noun category or the verb category in giving name to fact is as unconscious in the one language as in the other. As Émile Meyerson(13) has said, "L'homme fait de la métaphysique comme il respire, sans le vouloir et surtout sans s'en douter la plupart du temps." Comparative linguistic study makes it immensely easier for us to discover the unconscious metaphysic of our language and to make allowance for it.

Failure to appreciate the role of the structure of Indo-European languages in affecting perception has repeatedly led western science into error. The "luminiferous ether" of classical physics was created for the express purpose of standing as a subject of the verb "to wave." When the Michelson-Morley experiment and Einstein's analysis finally showed that the substantive ether had to be abandoned, the decision was a traumatic one. Similarly, in biology, the substantive "protoplasm" was created to stand as the subject of such verbs as "to metabolize." Led by F. G. Hopkins(14), biologists are now abandoning the substantive as a scientific concept.

The structure of our language has probably played an important role in determining the order in which we have uncovered natural phenomena. Compare, for example, the ease with which we discovered and accepted the germ theory of disease with the difficulty encountered by the vitamin theory of nutrition. The former advance was made in a few decades in the latter half of the 19th century. Vitamins, by contrast, had to be discovered and rediscovered repeatedly, by Hawkins (1593), Lancaster (1601), Woodall (1639), Lind (1753), and Capt. Cook (1772), among others, and yet at no time was the knowledge stabilized until Hopkins clearly defined the phenomenon (1906) and

Funk named it (1912). Why was a vitamin so hard to accept and a disease germ so easy? Was the reason not, at least in part, because the latter fitted in with the metaphysic of Indo-European so much more easily than the former? We already had sentences of this sort, "A spirit makes him sick," in which we had only to substitute a new actor, *e.g., Eberthella typhosa,* to create a new doctrine. In contrast, the sentence "What he doesn't eat makes him sick," failed to make sense to men who spoke, and thought, Indo-European. Biochemists had to find a substance to name, and had to create the substantive "vitamin" to stand as actor in a new sort of sentence, before the new idea could carry conviction. Even today, we still backslide frequently and say "He has an avitaminosis," though how one can *have* a lack of something is most mysterious. Such sentences are just part of the pathology of our language.

The comparative historical study of the germ theory and the vitamin theory leads us to realize that there are at least 2 different kinds of analysis involved in scientific advance. The first kind we may speak of as the analysis by simple subdivision. The type question may be given in symbolic form: "Is all fruit, fruit—or are there apples and oranges?" Once the question is asked, success in finding an answer is almost assured. When one suspects diversity, he usually finds it. Thus the skier discovers many kinds of snow and the physician many kinds of fever. The "typhus" fever of 200 years ago was found to be differentiable into 2 diseases—typhus and typhoid. Malaria gave way to malarias, and unitary hemophilia to many different hemophilias. Similarly, such classical psychiatric entities as schizophrenia must yield to *subdivisive analysis.* The work is not easy, but we always know what it is that we are trying to do.

The second type of analysis is far more difficult, for it involves changes in the categories of thought. We may call it *categorical analysis.* The type question takes this symbolic form: "Is it an apple or an orange that I'm dealing with—or is it perhaps the singing of a bird?" So stated, it sounds ridiculous; but inability to ask such an odd-sounding question has repeatedly delayed the progress of science. Consider "heat," for example. From the time of the ancient Greeks down to, and including, the work of Robert Boyle, the facts connected with heat were terribly confused because "heat" was assigned to the wrong category—that of the substantives. Being a substance, it should have weight, of course; convinced of this, a British physician, George Fordyce(15), found that heat did indeed have weight. The first experiments of Count Rumford seemed to confirm this belief. But Rumford was convinced that the wrong category of thought was being employed in calorimetric studies, and so he went to a great deal of trouble to look for experimental errors, which he found and corrected, thus arriving at the correct conclusion that heat, like the singing of a bird, is an activity, a process—and not a substance or object, like apples or oranges. Its category has rather more to do with verbs than with nouns.

Subdivisive analysis is (comparatively) easy. Categorical analysis is always difficult. There are no rules for it. It requires insight and courage (or insanity) to slash away the unconscious strictures of language. Such action may generate an almost unbearable load of insecurity in the analyzer. Traditional language always *seems* clear. There seems to be great clarity in such sentences as these: *Heat flows. Life left him. He is possessed of a devil. He has a disease. He has a neurosis.* But, for all their apparent clarity, they are surely all wrong. Their categories are wrong. All of them assert false substantives, when the discussion should be couched in terms of processes.

It is not easy to abandon false language, nor need it always be completely abandoned when it is traditional. There may be no words, or only awkward language, for correct ideas that are new, and we cannot, as human beings cut ourselves off from the support of our fellow men while we grope for new speech. As Thomas Mann(16) said, "The word, even the most contradictory word, preserves contact—it is silence that isolates." We cannot let linguistic perfectionism isolate us while we indulge in analysis. In the meantime, we must speak, even though we recognize that our idiom is, in some sense, false. So we say, "The sun sets" and "Heat flows," though we know these are false statements. So also may we

continue to say, "He has an avitaminosis," or "She has a neurosis," though we know these statements are also false. For the sake of the present we must continue to speak; but for the sake of the future we must continue to analyze our language. And analysis, as Wittgenstein(17) has said, is "the battle against the bewitchment of our intelligence by means of language." This battle is not part of a push-button war waged from afar. We are in the midst of this battle as we are in the midst of life itself, using as a weapon against language, language itself. There is no other.

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LOGICAL ANALYSIS[1]

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Some years ago the late MacFie Campbell said that when we read, for example, in the admissions statistics of the Burghölzli, that 576 of the patients were "schizophrenic," we do not really know from what disease, if any, they were suffering. Hunt *et al.*, in a recent study carried out in a Navy setting, report that agreements on the diagnosis of "psychoneurosis," made by groups of psychiatrists working independently of each other, reached only the disturbingly low figure of 24%. These facts, and others with similar implications, indicate the need for this kind of symposium, in which our nosological problems can be candidly examined from different points of view.

That our language in psychiatry *needs* clarifying seems to be the general opinion both of those who have logically investigated the subject and of those who would like to understand it by less onerous methods, not even involving the use of a dictionary. Some critics, who are (I fear) "dynamically oriented," have indeed hinted that this unclarity is not entirely accidental, so that we are on occasion wittily rebuked with echoes from Oscar Wilde, "Nowadays to be intelligible is to be found out." There is, of course, truth as well as animus in these charges, but when coming out strongly for "clarity" and against "obscurity," it is well to remember Santayana's remark that most persons' idea of clarity is to hear their pet prejudices expressed in the phrases they themselves habitually employ, and to recall also Freud's comment about the narcissism of small differences. Vagueness and confusion, in varying degrees, on most subjects, seem to be a part of the human condition, and even those rationalists, like Descartes and Spinoza, who spoke most fervently of "clear and distinct" ideas, realized that outside of subjects like geometry, such ideas were more in the nature of normative ideals, which were perfectly actualized only in the Divine Intellect, and not in our weak, passionate, confused, finite minds. But I am certainly not recommending either theological obscurantism or religious humility before the mysteries of nature, but only that we recognize our limitations when it comes to making our psychiatric language unambiguous, while keeping it clinically applicable, and that we not only enjoy, but also realistically try to "work through," our semantic insights.

We are all agreed, I take it, that "nosology" refers to the science of the classification of diseases. As such, nosology is a branch of applied logic; at least the theory of classes and classification has traditionally been considered a part of logic. This is the reason for my selecting the title, "Logical Analysis." I realize (as did the Program Committee) that the problems here are many and complex, and need to be approached from many angles, historical, clinical, and so on. But *one* of the approaches required is to try to see how certain logical distinctions and concepts apply to these problems, and to evaluate their usefulness in practice.

Why do we need nosological categories in psychiatry? For several important reasons, of course, such as to communicate clearly about patients, to label unambiguosuly their disorders, to investigate the causes of their illness, to make inferences as to prognosis, and to decide what is the best form of therapy. All of these clinical and investigative operations presuppose criteria that are intelligible and communicable, whose function is to guide us in selecting patients for inclusion in, or exclusion from, a given class, say the class labelled "psychoneurotics" or "schizophrenics," or any sub-class in these large clinical groups. It is the purpose of a definition to formulate clearly and unambiguously these diagnostic criteria, for without such a definition, which logically governs the application of the diagnostic term, we cannot, by any inquiry into the clinical facts no matter how exhaustive, ever

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discover whether a given patient, for example, is or is not schizophrenic.

But definitions of class terms are optional rules of language. As such, while they may be sanctioned by widespread or authoritative usage, they ultimately express and partly rest upon human choices. Such choices may be arbitrary and ignorant, or judicious and well informed, or, as in the usual case, varying degrees of both. But since they are choices, they will express, inevitably, non-rational determinants, which are not demonstrably valid or true, and may not even be widely shared or socially approved. This situation of course generates many problems and makes it very difficult, particularly in a field like psychiatry, to formulate criteria of classification that will be generally acceptable.

In view of these considerations, it seems obvious that classes, in any pragmatically relevant sense of the word, are not ontological realities existing in nature independently of our purposes and selections. It is not Nature, in the phantasied role of phallic mother, who sternly fixes limits to our classes, as these are intensionally formed, or cuts them off sharply. Nature, in the romantic tradition as in sober fact, is indifferent, protean, and inexhaustible. It is *our* need to conquer that leads us to divide and to *select* out of the infinite possibilities, only some of which are ever actualized in our perceptions or even designated by our inferences, those properties that we feel best serve our purposes, and henceforth—often with paranoid rigidity—to cling to *these* properties and to argue that they constitute "the essence" of the thing, the person, or even the God, in question. Thus we end *by definition*, which in some cases means by magical fiat, the otherwise endless quest for certainty.

But definitions are tools of inquiry, not the goals thereof, and to mistake their instrumental function for a metaphysical guarantee of truth and security, is the error at the bottom of most "systems," nosological or otherwise. This instrumental function of definitions is not unitary or simple, but serves diverse purposes and (when successful) satisfies different cognitive needs: the need for tools of analysis, for guides to interpretation, and for norms of correctness, to which latter we can appeal for *sanction* in case of stubborn disagreements. While definitions are not, strictly speaking, either true or false, since when unambiguously formulated they make no empirical truth-claims, there are *other* criteria that do properly apply to definitions, such as clarity, utility, and adequacy. Like all general criteria, what these mean and how they apply will, in practice, vary with the context of their use: *i.e.*, with our background knowledge, our special competence, our purpose in a given inquiry, the nature of the problem, and so on. But if definitions of nosological terms like "psychoneurosis" or "schizophrenia" are to be clear, useful, and adequate, it is evident that these definitions cannot be mere arm-chair constructions, suitable to the relaxed surroundings in our favorite ivory tower. The definitions we need in psychiatry must reflect the urgent atmosphere of the ward and the clinic, with their sweat and tears, and sometimes even a little blood. For these are the sad facts of life, and the instrumental value of our definitions (or classifications) will depend upon their usefulness in helping us to clarify and organize these facts, to understand better their causes and effects, and to communicate more effectively with our fellow workers.

Toward this end, let us look at some of the "life facts" regarding mental disorders. One fact about them, which is relevant to our nosological problem, is that mental disorders are not objective entities, with well articulated structures that universally, regardless of bio-social contexts, exhibit the same properties. Rather, as behaviorally manifested, they are highly variable modes of response to life situations, no two of which are identical. Viewed psychodynamically, they are ways (usually ineffective, in the long run) of seeking goals, conscious and unconscious, while at the same time defending against dangers, internal and external, real and imaginary, which are variously distorted and inappropriately handled. In psychiatry, Dewey's metaphysical aphorism that circumstances not only alter, but in fact constitute cases, is almost strictly true. I say "almost," for in the clinical variations some recurrent themes are usually discernible. These make up recognizable patterns of stress and defense, so

that sometimes we are justified in saying that nature repeats itself, and not merely the psychiatrists one another. If this were not true to some degree, we could not infer similarities or put numerically different cases into the same class with the same name; nor could these, by hypothesis, unique individuals function logically as a basis for inductive generalizations. On such assumptions rational discourse would come to a standstill and a "science" of psychiatry would indeed become a misnomer.

Of course I am able to assert these statements, with justification as I believe, because classificatory terms in psychiatry, like "psychoneurosis" and "schizophrenia," do mean *some*thing, the problem usually being, in a given context, to find out exactly *what*. Since this meaning is not inherent in the words, *qua* sign-vehicles, and since no diseases exist, self-labelled, in a state of nature, it seems obvious that the meaning or meanings of these diagnostic terms are a product of linguistic custom, as this operates through and is perpetuated by, with varying degrees of modification, the sign-behaviors of organisms like ourselves living in some more or less controlling culture.

So our nosological problem is not how to *invent* a language to describe mental disorders. We do not, and cannot, start *de novo* with semantically a clean slate. The idea, indeed, that this would even be desirable is largely a rationalistic myth. For it overlooks the fact that any living descriptive language becomes ambiguous in use, *i.e.*, when it is applied by different persons with different purposes in mind to different things or situations. Only dead languages are fixed and cease to change, and even their meaning, *qua* interpreted by us, is the unstable end-result of a more or less reconstructive process.

The ambiguity in use, mentioned above, can in general not be very effectively controlled or eliminated by formal definitions, at least not in a subject like psychiatry. The disease processes we work with clinically, like the sick persons who exhibit them, rarely if ever fit exactly into any sharply defined class. This defeats the need, which is very strong in some of us, for a tidy, well-ordered universe with everything properly named and in its right place. But nature was not made to suit our domestic, and sometimes quite obsessive, needs, and whether we like it or not, every case of mental illness is more or less different and must be understood partly in its own terms. Hence, the need for clinical "intuition," so-called, and for sympathetic "feeling into" or empathy. Our current abstractions and generalizations are too empty and vague and too uncertain in their implications to tell us what any particular behavior *in situ* really means or what is actually "going on" in any given case. We never know whether the compass we use, usually marked, "Made in Vienna," is pointing true North, though without it we might be lost completely, and the feel of it in our pocket is, in any event, reassuring.

In the light of these facts, it is clear why definitions of diagnostic class-terms are so unsatisfactory in psychiatry. From the statement, if true, that "This object is spherical," many other true statements follow regarding exact ratios between its diameter, surface area, volume, and so on. The knowledge that the object belongs in the class of spheres is accordingly rich in precise implications, so that the classification is, or may be, highly useful for various purposes. But from the statement, even assuming it is true, that "This patient is schizophrenic," what other statements, known to be true, can we validly infer? Some general statements, no doubt, which are of clinical importance, but its implications are comparatively vague and uncertain. But if we cannot, with empirical warrant, infer the truth of *some* reasonably definite statements, with regard, say, to prognosis, appropriate management, or likely response to this or that treatment, the knowledge that the patient properly belongs in the class of schizophrenics, even though it is based on recognizable symptom patterns, is certainly not very useful clinically.

But our difficulty here is worse than this implies, because of what is presupposed by the truth-claim that any given patient *does* "properly" belong in the class of schizophrenics. For this act of classification rests upon, as Russell neatly puts it, a "condensed induction." This means, for example, that in applying the class-term, "schizophrenic,"

to a patient, we presuppose the validity of a complex set of inductive inferences to the patient's past and future behavior, to more or less private events and mechanisms in his "mind," conscious and unconscious, as well as inferences that the patient is identical with, or at least resembles sufficiently in certain relevant respects, *other* patients in the extant group already labeled "schizophrenic." These inferences constitute a highly complex and very difficult to verify empirical hypothesis about outlying matters of fact. Obviously, the questions of fact raised by such an hypothesis cannot be answered by any definition of the term, "schizophrenic;" however, be it noted, neither can they be answered *without* adopting *some* definition. In short, and quite generally, definitions constitute necessary, but not sufficient, conditions of answering empirical questions.

Another closely related problem. One consequence of our lack of precise and dependable knowledge of the diseases (or, if you prefer, the "ways of life") called "schizophrenia," is that the certainty of the inferences warranted by our act of classification is inversely related to the determinateness of their content and to the exactness of the definition that is controlling the application of the diagnostic class-term. Thus, if what we are *saying* in calling a patient "schizophrenic" is highly vague and nearly empty of empirical content, then it may very likely be true, for so little follows from it that *could* be false. But the more teeth we put in our definitions and the sharper we make them the less certain we shall be that any particular food is proper and safe for their use. Faced with this oral dilemma, we can nervously go back and sharpen the teeth still more (the obsessional solution) or we can confusedly declare them false and throw them away (the hysterical solution).

What this analysis reveals is a Logical Principle of Indeterminacy which says that the more exact our definitions, and the more implications they have that can only be tested in future situations, the more uncertain is their application to any given case. In short, if what we say is highly determinate and also usefully informative, it is more likely to be false; on the other hand, if what we say is loosely indeterminate, it is more likely to be true, but so empty of specific content that it is comparatively useless. As regards psychiatry, the cure for the headaches caused by this dilemma is perhaps less *formal* logic and more *empirical* science, though some of my friends increasingly rely on Bufferin, which certainly works more than twice as fast.

Some clinicians, to be sure, worry little about such dilemmas. Long accustomed, perhaps, to the fog they work in, they have learned somehow—as used to be said of the British—to "muddle through." Since they believe that very little follows, as regards prognosis or treatment, from applying most of the standard diagnostic terms to a given patient, their relaxing motto seems to be, "Why bother?" What is needed rather, they declare, is increasingly better descriptions (which are often clearer when couched in colloquial language) of individual patients, their relevant histories and current behaviors, *not* more allegedly precise definitions, since the so-called precision is largely illusory and futile anyway. So away with rigid definitional constraints on our free imagination, lest we become prisoners in our own verbal strait jackets!

This trumpet call to freedom is very stirring, and I am almost persuaded to throw away my old strait jackets—if some metalinguistic Houdini will only lend me a hand. But, irony aside, the issues here between loose-jointed pragmatists and ankylosed rationalists are as old as the hills and quite as enduring, for they express (and defend) different personality structures, value systems, and insecurely vested interests. Reason here, as in most controversies, points to "the middle way," wherein peace with justice may be found. (Whether Confucius or Eisenhower say, I am a little uncertain!)

But lest these ataractic words of wisdom reduce too much our semantic vigilance, it is well to remember that the logical requirements for theoretic communications in psychiatry or for the successful construction and validation of explanatory hypotheses, are much more demanding and rigorous than are the rules of thumb or the ineffable intuitions that some very relaxed and mostly silent clinicians seem to find sufficient. Some psychotherapists may tell us, in a mood of self-revelation, that their "personality" is their "main skill," but are we going to agree (or

disagree) with Dr. Ernest Jones *or* with Dr. Percival Bailey on *such* grounds? If so, we only confuse emotional influence with logical proof, and make out of our (hardly budding) science a full-blown farce.

But in our laudable efforts to make psychiatry as scientific as possible and our hypotheses in this field clear enough to be operationally testable, it is only being realistic to recognize that the inherent obscurities of the subject matter of psychiatry will make for corresponding difficulties with our language and our nosological categories. For language that purports to describe matters of fact is limited in its clarity by the clarity of its subject matter, as this is understood by us; otherwise we shall not be able "to see" how the language, our (perhaps formally) "well-defined" terms, apply to it. There is, after all, little point in straining at a hair, not properly split, and then swallowing a ghost. If the subject matter is very obscure, and we cannot, with our observations, experiments, and interpretations, make sense out of it or discover some intelligible order in it, then our descriptive language *about* this subject matter will remain unclear, and our thinking about it largely futile. The moral, which logicians particularly need to take to heart, is that while logic and a clear head help, and their use and breeding should be encouraged, it is fairly obvious that prediction and control, the development of ideas that are "existentially fit," as John Dewey used to praise them, must ultimately depend on the success of our interactions with external situations; *i.e.*, in solving the problems that these situations—as limitations upon, but also conditions of, the satisfaction of our needs—recurrently generate. The problems here are all too real and appallingly complex. So in our counter-phobic attempts to overcome "the threat of clarity," let us not exhaust ourselves unduly, lest we fall an easy prey to the lure of simplicity, in a world that is not only too much with us, but often too much for us.

It is, I suppose, mainly Dr. Szasz's job, as a clinician of wide experience, to be "practical" on this theoretical symposium, but psychiatrists have a hard job to do and are understandably impatient of theory unless it promises to help them to do this job better. So, in the popular language of William James, what is the "cash value" of our nosological categories? What are they supposed to do for us? Some psychiatrists demand a good deal of them, it seems to me. For a common opinion is that a diagnostic class-term should not only enable us to label a disorder clearly, but that it should reveal—that is, plainly imply—the true "nature" of the disorder, and also indicate its cause, or causes, and finally point the way to its cure, or at least amelioration, by suggesting, even if it does not explicitly state, what methods to employ in treating it. This is a large order, and even if some doctors do order it, no one can deliver the goods. For one thing no one yet knows enough about mental disease to outline and then empirically fill in such a nosological scheme. The "scheme" would indeed, on such assumptions, not be a mere glossary or (say) a useful guide through the Vienna woods; it would have to be an exhaustive treatise on the subject, since it would cover symptoms, mechanisms, causes, and treatments.

Our dilemma here, and it is all too practical, is that such extensive knowledge, well organized and clearly stated, *is* needed ideally to formulate the clearest and most useful and adequate definitions of our nosological terms—just as an accurate map requires an equally accurate knowledge of its territory. But with no map at all, or one that is confused and misleading, how can we avoid complete disorientation?

The analogy is fair, and the practicable solutions are indicated. Just as we can gain *some* knowledge of a limited territory, particularly if already cleared a little here and there, by tramping over it, using our senses, and looking for signs; so—even without very good nosological categories—we can learn a great deal about mental disorders, their similarities and differences, by working with patients who suffer from such disorders. To be sure, calling them patients with "mental disorders" indicates that *some*body has already in some fashion solved at least part of our problem for us—as our parents helped us to decide what was "right" and what "wrong." Clinical experience shows, too, that with increasing familiarity with the behavior of such patients, we can often make plausible (if not rigorously verifiable) inferences as to the nature of their particular

disorders, and we can at least sometimes develop shrewd hunches as to the defense mechanisms manifested in their behavior (since Freud has here already marked the way) and in time we may come to understand their libidinal and hostile impulses, their special vulnerabilities and ego needs for happy, un-anxious, social participation and self-fulfillment. As a matter of fact, good psychiatrists do all this and more at the present time. And the truth seems to be, as many of them testify, that they do this without bothering their heads much about putting patients into logic-tight diagnostic categories. As Hans Selye phrased it, in another context, many patients simply exhibit "the syndrome of being sick." As for psychiatric patients, are not most of them, by turns if not all at once, anxious, hostile, depressed, confused, and unhappy? Some of them dissociate or repress more and isolate or project less, but most of these mechanisms, as well as other kinds, are defensively employed in *some* degree in some circumstances by most patients, not to mention their therapists. So that mutually exclusive and conjointly exhaustive diagnostic categories—whether based on clinical symptoms, dynamic mechanisms, or underlying causes, or a combination of all these factors—while perhaps theoretically constructible, are not clinically applicable—certainly not without leaving over a large number of border-line unclassifiable cases. I say "unclassifiable" but psychiatrists are nothing if not flexible and ingenious, so perhaps we can accommodate these confusing patients with such nosological rubrics as pseudo-neurotic schizophrenia, obsessional neurosis with schizoid tendencies, or psychopathic behavior syndrome masking an underlying psychoneurosis, mixed type! Evidently we earth dwellers are doomed to live in this twilight zone for a long time!

When it comes to so-called etiological classifications, which are optimistically demanded in some quarters, the plot thickens even more confusingly. For unless we *already* know what we *mean by* a diagnostic term, and have methods for identifying reliably its concrete referents, so that we can put a new case into a properly formed class with a sufficient degree of similarity among its members, unless we already know at least this much about our language and our patients, it is obviously impossible to discover the cause, or causes, of the disorder nominally designated. To look for the cause of we know not what, snark or boojum, is to join the somewhat comic ranks of the very worst metaphysicians.

Relative clarity on this point is the strength of those practical empiricists who insist that we should make diagnoses, or at least apply classificatory terms to patients, for purposes of treatment or some appropriate disposition, on the basis of overt behaviors, test performances, and physiological dysfunctions, with a somewhat gingerly inclusion of those subjective symptoms that can be most reliably inferred and assessed. By proceeding thus cautiously and empirically they feel that at least the rankest forms of nonsense can be avoided, and much time saved that might otherwise be wasted in futile debates over hidden "mechanisms" or archaic "causes." For example, to define the term "psychoneurosis" so as to imply that any case of this disorder must have as a necessary part of its cause an "unresolved oedipal conflict" strikes such "tough-minded" empiricists as sheer fatuity. For such a definition, they would say, begs the question of etiology, and contains several terms so loose, vague, and ambiguous, as to make it scientifically disreputable and clinically useless.

These critics often seem to me a little overexcited. But the Freudian language, I think we must admit, is rather vague, though some of this vagueness is reduced and a useful meaning sometimes emerges in limited contexts of use. But I do feel that so-called etiological definitions are hazardous, particularly in a field like psychiatry, where single causes are rarely, if ever, the whole story, and where few, if any, causes have been rigorously established, at least for the major disorders. This being so, we run the risk of closing our minds to alternative causal hypotheses whether about indoles or in-laws, and of prematurely freezing inquiry by including in our definition the unproved implication that we *already* know the truth about the causes of the disorder. Since this is false, or at best is only a part of the truth, such definitions are to be condemned. They are not etiological, but mythological.

If we are talking about general paresis or typhoid fever, that is another story. For I can see nothing fallacious in principle about

including in our definition demonstrated relationships between some identifiable class of referents, constituting the disease, as such, and some other distinguishable but constantly related antecedent factor, such as the *Treponema pallidum* or the *Eberthella typhosa*. Indeed the growth of knowledge generally leads to such changes in the content of our definitions. In short, we do not need to keep an open mind on a question that nature has firmly closed. But the moral is obvious. We should be very careful that nature *has* closed it, and not our own lazy impatience or excessive need for a feeling of closure.

The point here is that good logic, in setting up nosological categories, requires us to make distinct and to keep clear two related but different matters. These are 1. what is strictly implied, *ie.*, what cannot be denied without self-contradiction, because of the optional rules of our language and 2. what is to be accepted and believed as very probably true (and hence not to be rationally denied) because of our empirical knowledge of the contingent laws of nature. As Hume said, the fact that all husbands have wives does not prove that all men are married. This statement rests upon, and was intended to point up, the implied distinction between analytic and synthetic propositions: analytic propositions being necessarily "true," because of the definitions of their constituent terms, and synthetic propositions being contingently true *or* false, depending upon the relevant outlying facts. Taking account of this distinction in practice means that in every discussion and particularly in every case of apparent disagreement, we must make sure whether our nominal opponent is asserting some proposition because of the empirical facts, and would therefore, presumably, assert some different proposition *if* the relevant facts were different. *Or* is our opponent going to stick to his "assertion" because it logically "follows" from some concealed definition that contains nicely embalmed in it a secret but firmly believed-in hypothesis about (say) the cause of schizophrenia? If he is doing the latter, he may unconsciously or wittingly have maneuvered himself and us into the position that his "assertion" cannot be denied, *regardless* of the facts, because to *attempt* to do so would violate the law of non-contradiction, the keeping of which is required by both sanity and logic, since it is a necessary condition of rational choice or of "saying" *any*thing. The way out of this dialectical "double-bind," in any given situation, is to examine critically the particular definitions of which it is the logical consequence. For *their* adoption was *not* necessary, and may have been unwise.

What I have been saying and recommending is too abstract and complicated for me to summarize it clearly, but on the issue raised earlier as to whether nosological classifications ought to be based on the ground of overt behaviors or intra-psychic mechanisms or etiological factors, I think we shall, and wisely so, continue to use *all* of these "grounds" for classification. Nevertheless, it seems to me to make better sense and may avoid some outright contradictions and the classification is likely to prove clearer and more useful, if we set up our nosological scheme as what might be called a strategy in depth. What I mean is to start with overt behaviors, some kind of get-at-able facts on which agreement may be quickly reached and about which disputes are easily avoided or readily settled. Such public facts clearly formulated would constitute protocols, which would function as grounds for empirical generalizations about certain classes of behavior, for example, approach and avoidance reactions. With enough data of appropriate kinds some of the approach reactions may be more narrowly classified as "sexual" and some as "aggressive," and some of the avoidance reactions as "sensibly cautious" and some as "morbidly fearful"—descriptions that already include a good deal of interpretation and evaluation. There is not time to spell this out here, but the general point I want to suggest is that by proceeding in this way, carefully and modestly, we can make secure our empirical (as contrasted with protecting our narcissistic) supplies, before venturing into allegedly "deeper" and certainly more controversial interpretations.

For surely it is better practice to base our nosological categories on criteria that, so far as possible, can be operationally checked by reference to public facts and can be socially justified by reference to shared values. This means that we must curb our "will to be-

lieve," at least at the outset, and not make dubiously inferable mechanisms or repressed complexes long since buried the *initial grounds* of the classifications. If some of these far-flung inferences are adequately tested and confirmed by agreed-upon methods at some future time, well and good, and Freud be praised by some new Jones. Perhaps a good many of these inferences have *already* been amply supported by psychoanalytic research—certainly the analysts think so. But as long as intelligent and well-trained men strongly disagree, the Impartial Observer (that great character of fiction with whom every writer is naturally identified) must recurrently wonder who is right. *Neither* is, probably, in the sense he believes; nor is his "opponent" wrong, in the sense he projects. Still, as Santayana wistfully remarked, "agreement is sweet, being a form of friendship." Those who long for such agreement may find grounds for hope in Spinoza's faith that men, in so far as they are rational, *will* agree. Certainly psychiatrists should know, if anyone does, how to make us all rational, and I am sure you join with me in the hope that they will perform this miracle at once, so that we can all be friends united in the brotherhood of objective truth and believers in the same nosological system. Peace without Equanil—it will be wonderful!

THE PROBLEM OF PSYCHIATRIC NOSOLOGY

A Contribution to a Situational Analysis of Psychiatric Operations [1]

THOMAS S. SZASZ, M. D.[2]

The problem of psychiatric nosology has posed a persistent difficulty during the past half-century because, it seems to me, it is one of those problems that is insoluble in the form in which it is usually tackled. Certain fundamental concepts and technical aims must be clarified first. Only after this has been accomplished will we be in a position to return to the problem of psychiatric nosology and re-examine it in a new light.

WHAT DOES PSYCHIATRIC NOSOLOGY CLASSIFY?

I want to emphasize the need to scrutinize the very notion of "psychiatric nosology" and to divide it into workable fragments. The reason for this suggestion is that this problem encompasses, as far as I can see, the following, often mutually exclusive, methods and tasks. First, in relation to the word "psychiatric," there is ambiguity about the domain of this field. Is psychiatry a branch of medicine? And if so, do we mean by this that it is a therapeutic discipline based (as far as possible) on the methods of physics and chemistry? Or do we mean that it is the study of human behavior and human relationships? And if so, do we conceive of it as a branch of, or allied to, psychology and sociology? If this is what we mean, then we are committed to the psychological method and frame of reference. We cannot have both, or a combination of the two, either by simply wishing or by coining a word like "psychosomatic" (39). To illustrate this, let us consider the diagnosis of general paresis. Does this diagnosis refer to a physico-chemical or a psychological phenomenon? Clearly it refers to the former. It is not characteristic, or even descriptive, of any particular behavioral event. How then can we hope to bring it into a meaningful relationship with other "psychiatric diagnoses" such as hysteria, reactive depression or situational maladjustment? These, and many others, refer to behavioral events and are meaningless in a physico-chemical frame of reference. (They are, however, modelled after, and are not meaningless in, a medical framework of concepts.) Yet, such dissimilar concepts are now all subsumed under the heading of "psychiatric diagnosis." This is as though in the periodic table of elements, we would find coal, steel, and petroleum interspersed among items such as helium, sulfur and carbon. In my opinion, this is one of the reasons why the taxonomic system known as "psychiatric nosology" does not work and why attempts to improve it—which have not taken this factor into account—have failed to satisfy anyone but their authors.

A second source of difficulties arises as a result of the several implications of the word "nosology." Nosology means the classification of "diseases." This immediately casts psychiatry into the medical (and physico-chemical) mold into which it fits only according to the first definition of this discipline (36). In this view, psychiatry is the study of diseases of the brain, and psychiatric nosology is the classification of these diseases. Others, however, regard psychiatry as the study of diseases of the "mind"; "psychopathology" is the nosology based on this scheme (15). The trouble here stems from the concept "mind." Still others have attempted to overcome this difficulty by recourse to a system of "disorders of behavior" (8). Thus far we have enumerated three categories of concepts (brain, mind and behavior). To the taxonomy of each of these, the expression "psychiatric nosology" is applied. Not only do psychiatrists use different categories, usually without

[1] This is an abbreviated version of a paper read with the title "Psychiatric Nosology: Clinical and Sociological Implications" in the theoretical symposium on "Psychiatric Nosology," at 113th annual meeting of The American Psychiatric Association, Chicago, Ill., May 13-17, 1957. The full length text will appear elsewhere.

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specifying their scheme, but often concepts from two or all three of these categories are combined within a single taxonomic scheme (*e.g.*, general paresis, latent schizophrenia and homosexuality).

Although the expression "psychiatric nosology" means principally the classification of psychiatric disorders (whatever these may be), modern developments in psychiatry have led to further taxonomic possibilities. This state of affairs has resulted from the fact that psychiatry consists of *both* a "basic science" and of a "clinical technique" (or several such techniques). It is only the latter that is oriented toward "diseases," "diagnosis" and "treatment." The former is oriented, like all sciences, toward an essentially non-judgmental (non-evaluative) understanding of the phenomena which it studies. "Nosology" in this context becomes akin to the taxonomic systems of the physical sciences in that it aims at a system of *ordering* phenomena that is useful not for "treatment" but for "scientific mastery" (whatever that may mean, depending upon the developmental stage in which the science finds itself and upon social factors). Some of the classificatory concepts of psychoanalysis (*e.g.*, repression as a characteristic feature of "hysteria") resemble most closely such non-evaluative concepts of classification. Unfortunately, however, most of these concepts have been re-introduced into a medically-modeled system of psychopathology(20).

AN OPERATIONAL APPROACH TO PSYCHIATRIC NOSOLOGY

Classification is but a special case of the more general psychological phenomenon of category-formation. This process depends, as we know, upon the psychological characteristics of the person engaged in forming categories and upon the social situation in which he participates. The dependence of the psychological variable upon brain function, for example, has been studied and demonstrated in an impressive fashion by Kurt Goldstein(16-18). The role of the latter factor, that is, the effect of the social situation on category-formation, is a matter of common knowledge and may escape attention precisely because it is so obvious. In other words, it would be banal to stress that from the point of view of the economist or of the jeweler there are no "similarities" between coal and diamond. In an economic situation, one may distinguish diamond, gold, platinum and money as members of the (same) category that pertains to *economic value*. The chemist, on the other hand, may classify diamond and coal as "chemically similar" members of the category called *carbon*. Surely, there is no need to belabor this point. The example cited illustrates what I mean by an operational approach to nosology; the word "operational" is used in this context to denote not only the characteristic methods of observation but also the social situation in which the observation is made and its purposes. This extension is inherent in the philosophy of operationalism (14). Let us look at psychiatric nosology in this light.

It is apparent at once that the social situations in which so-called psychiatric observations are made are diverse, and yet it is generally assumed that one and the same system of classification should be useful for all of them. We may name but a few of the major "psychiatric situations," without implying that our list is exhaustive: the mental hospital, private psychiatric practice (including the psychoanalytic situation), the child guidance clinic, the psychoanalytic training system, military service, the court of law and jail. Psychiatric diagnoses are made and used in each of these settings (10, 13, 30, 34). *Yet the methods employed and the purposes for which diagnoses are made differ.* I submit, therefore, that we can not expect to be able to take a system of psychiatric nosology developed in one situation and expect it to be meaningful and serviceable in another.

Unfortunately space does not permit a detailed consideration of the characteristics of the various psychiatric situations that have been listed. To do so would require, at the very least, a separate treatise for each. I have offered fragments of such operational descriptions of specific psychiatric situations elsewhere (*e.g.*, for the psychoanalytic situation(37, 38), for the psychotherapeutic situation with the schizophrenic(32) and for the legal situation(40)).

Someone might ask, what is it that corresponds in these situations to the differences in the classificatory schemes of the jeweler and the chemist, in the example cited. My comments shall be restricted to answering this question. I hope that this will illustrate and clarify the general problem under discussion. For this purpose, we may consider three situations: that of the psychiatrist in a state mental hospital, the psychoanalytic situation and the situation in the court of law (psychiatric expert testimony). In the first of these, the relevant category into which the patient must be fitted is principally that of psychosis versus non-psychosis(4, 9). The former tends to justify forcible retention in the hospital, the latter does not. Also, the diagnosis of psychosis, in this context, legitimizes the use of various, sometimes drastic, therapies. In the psychoanalytic situation, the same term, that is "psychosis" (or "psychotic") refers *only* to certain mental mechanisms or patterns of human relationships; it does not refer to overt behavior or social judgment. This method of classification is somewhat analogous to that of the chemist, and consequently the concept "psychosis," as used here, will *not* point to any significant phenomenological similarities between the patient under study and others who may be either inside or outside of mental hospitals(32, 33). Finally, in the legal situation, psychiatric diagnostic terms must be categorized in terms of two mutually exclusive classes, those who are punishable and those who are not(35). This is inherent in the legal situation just as it is inherent in our present economic situation that diamond is more valuable than coal. A non-judgmental, purely descriptive system of classification—while it may be as accurate as it would be to state that both diamond and coal are forms of carbon—is no more appropriate to the legal situation, than would be its analogue for purposes of banking.

Let us now take a brief glimpse at the recent history of psychiatry, viewed in this light. We may restate our problem by recalling that the questions that we have asked were: *Whom do we study, where, and with what methods?* We have called attention to how various "psychiatric situations" on the current scene differ from one another. Let us ask the same questions now about the principal psychiatric figures since Kraepelin.

Kraepelin's chief objects of observation were inmates of mental hospitals(21). He studied them by direct common-sense observation. The underlying assumption was first that they suffered from diseases much the same as other diseases with which physicians were familiar, and second that society and the physicians who studied them were "normal" and constituted the standards with which their behavior was compared. Accordingly, patients were subsumed under categories ("diagnoses") based on the behavioral phenomena ("symptoms") that were judged to be dominant. The spirit of the inquiry precluded emphasis on specifically individualistic features and determinants. Kraepelin's approach, as Zilboorg (43) noted, was therefore at once humane and inhuman. He was interested in man, but was not interested in the patient as an individual.

The psychiatric situation that characterized Bleuler's work(2) was essentially similar to Kraepelin's. The main difference lay, I think, in the fact that Bleuler had a much greater interest in the patient as an individual. He, therefore, noted more personally unique phenomena and saw, for example, that patients with dementia praecox were not really "demented."

Now we come to Freud, who, most of us will agree, saw much more than his predecessors. I would like to suggest that he saw more partly because he was not fettered in making his observations in a single situation with limited techniques. Indeed, he enlarged the psychiatric situation to include almost anything that came across his horizon. Thus, he rapidly shifted from pure clinical observation with or without hypnosis, to observations of himself, of other socially normal individuals, so-called neurotics, as well as to observations of the biographies and autobiographies of artists, "psychotics" and others. On the whole, he too tended to use society and the observer as norms against which the patient and his conduct were measured. In contrast to his predecessors, however, he made this standard explicit. Prior to this time, it was not fully realized that such a standard was implicit in the then cur-

rent schemes of psychiatric nosology. The nosological scheme that Freud used, as might be expected from what has just been said, was chaotic. He retained the Kraepelinian scheme as far as the diagnostic words were concerned but used them as he pleased. This has resulted, among other things, in repeated forays of re-labeling his cases by later authors(28). Once again, Zilboorg(42) clarified this matter by empasizing that Freud cared little about the diagnostic labels he used. He concentrated, as we know, on accurate description, reconstruction and on the formulation of new abstractions to account for what he observed (*e.g.,* transference, repression, reaction-formation, etc.).

There have been attempts to use psychoanalytic abstractions in the formation of new psychiatric nosologies. These have failed because they have mimicked the Kraepelinian and Bleulerian systems (*e.g.,* by suggesting that hysteria be diagnosed by the presence of repression as the chief mechanism of defense). Such attempts could succeed, if at all, only by limiting their range of applicability and by adhering to operational criteria (*e.g.,* the patient's reaction to the analytic situation(11).

Adolf Meyer's approach was a great departure from the basic concepts of Kraepelin and Bleuler in that he did not subscribe to the notion that mental disorder is a phenomenon akin to physical disease(24, 25). Yet he remained more closely allied in his work to these men then to psychoanalysis, probably chiefly because he continued to focus attention principally on so-called "clinical material" that is, on those who are mentally ill by social criteria. His method was, by his own statement, that of "common sense"(22), but in his thinking he combined biological, historical, psychological and social considerations. He developed a system of classification not of "diseases" but of "reaction types," meaning thereby that disorders of behavior may be classified according to their predominant symptoms. It is important to note that the technical terms—the "ergasias"—which Meyer suggested for these categories were never widely accepted in spite of his great influence on American psychiatry. Within a few decades his system of nosology became an historical relic.

Kurt Goldstein has become well-known for his observations in still another psychiatric situation: he studied the brain injured, combining in his approach the methods of neurology, clinical psychiatry and psychological testing(16). In addition, he introduced certain philosophical and linguistic considerations(17) in his studies which have also proved significant. While his name is not customarily associated with any nosological innovations, it should be noted that he did create two new categories—the concrete and the abstract attitudes(18)—and that these grew out of the particular situation in which his observations were made.

We may also note, at this point, that Bleuler's, Freud's and Goldstein's nosological categories continue to be used. All make good sense in the situations in which they originated. They have, however, since been removed, transplanted and combined with one another, and used in all manner of situations. Is it then surprising that our current psychiatric nosology is a modern Tower of Babel?

Considerations of some recent work in psychoanalysis would throw further light on the interrelations of the social structure, the methods of, and the classificatory schemes appropriate to, various psychiatric situations. Suffice it to note that most of these developments have increasingly abandoned the traditional nosological concepts and have developed new concepts and terms of their own. Harry Stack Sullivan's contributions (31), for example, can not be fitted into our current official nosology without doing the utmost violence both to him and to our nosology. The same is true of other current contributions to the psychology of "schizophrenia" and of the entire trend toward an object-relationship type of approach(12). These considerations underscore the need to develop adequate systems of classification, rather than to continue paying lip-service to an outmoded nosology, as we progress in our psychiatric knowledge.

PANCHRESTONS IN PSYCHIARY

In connection with the word "protoplasm," Hardin has recently called attention to the

danger of words that "explain everything." He wrote:

> Such enemies of thought, like all enemies, may be easier to spot if we label them. Such "explain-alls" need a name. As we borrow from the Greek to call a "cure-all" a *panacea*, so let us christen an "explain-all" a *panchreston*. The history of science is littered with the carcasses of discarded panchrestons: the Galenic *humours*, the Bergsonian *élan vital*, and the Drieschian *entelechy* are a few biological cases in point. A panchreston, which "explains-all," *explains* nothing (19, p. 113).

Clearly, panchrestons have played, and continue to play, an enormous role in psychiatry and psychoanalysis. Percival Bailey's address(1) last year to this Association may indeed be regarded as a discourse on the existence of panchrestons in psychiatry and on the uses to which they are put. He overlooked, however, all that we *do know*, and all that has been discovered during the past half century. By concentrating attention on panchrestons, one naturally limits himself to that which remains to be elucidated. I would like to emphasize this point, in order to make it clear that my subsequent comments are not intended as a wholesale criticism of psychiatry, or any of its branches, but are offered simply as additional considerations to be taken into account in connection with the problem of how to improve our nosology.

It is clear that many terms—some diagnostic, like schizophrenia, others non-diagnostic, like libido—function as panchrestons. In other words, "schizophrenia" is supposed to "explain" so-called insane behavior in much the same way as "protoplasm" explained the nature of life, and "ether" the manner in which energy travels through space. Not only do these words *not* explain the phenomena in question, but, as Hardin(19) rightly emphasized, they hinder understanding an explanation. If this is so, it means that just as "ether" and "protoplasm" obscured important problems in physics and biology, so "schizophrenia" (and many other psychiatric words) may obscure fundamental problems in psychiatry.

We touch here on an exceedingly important problem, but one that is in no way peculiar to psychiatry. Accordingly, we need not dwell on it and may assume that analogous developments in other sciences constitute a lesson that we must learn. From a point of view of psychiatric nosology this means that categories such as "schizophrenia" may be doubly harmful: first, such categories are unsatisfactory as readily validable concepts for purposes of classification, and secondly, they give rise to the misleading impression that there "exists" a more-or-less homogoneous group of phenomena which are designated by the word in question (*e.g.*, "schizophrenia," "hysteria," "malingering"). If this line of thought is correct—as I believe it is—it leads to the realization that the "problem of schizophrenia," which many consider to be the core-problem of psychiatry today, may be truly akin to the "problem of the ether." To put it simply: there is no such problem. The task is, rather, to redefine our questions so that they become manageable with the technical tools at our command. In the case of "schizophrenia" this will mean, first a conceptual clarification of the manifold meanings of the word, and then work along clearly defined methodological lines—whether biochemical or psychoanalytic—aimed at elucidating specific "facts" rather than "explaining" global concepts. Thus biochemical studies may throw light on disorders of brain function, much as the discovery of the histological lesions of general paresis threw light on the presence of a physically damaged brain in these patients. There is no reason to believe that this may not prove to be the case for *some* patients who by current criteria might be labeled "schizophrenic." Similarly, studies along psychological and social lines should prove enlightening about processes of object relationships, the use of language and symbol-formation and other features characteristic of the behavior, in certain situations, of so-called "schizophrenic" patients. It would be a mistake to believe—or so I submit—that such researches will "explain schizophrenia."[3] Instead what may happen

[3] In last year's theoretical symposium Pauling stated: "I am sure that most mental disease is chemical in origin, and that the chemical abnormalities involved are usually the result of abnormalities in the genetic constitution of the individual" (27, p. 492). This is a sweeping claim that is buttressed, at present, by little more than the scientific prestige (derived from another field) of its distinguished author. It seems to me entirely plausible that in-

is that various behavioral processes will be better understood and the need for the word "schizophrenia" will disappear.

A RECAPITULATION AND SOME FURTHER CONCLUSIONS

In the preceding pages, psychiatric situations and nosologies (more-or-less) appropriate to each were discussed in the light of the philosophy of operationalism. This word is used to designate that principle of scientific philosophy which emphasizes the over-riding importance of an explicit awareness of the particular methods of observation used in each study. I have extended its use, somewhat, to include in the concept of "method" the nature of the social setting in which the observation took place. This extension is implicit in the principles of operational philosophy and it has been explicitly developed by students of what is often referred to as the "sociology of science." The relevance of this extension to the study of psychiatry need not be belabored, since we are fully aware today of the immense significance of the interpersonal and social matrix in this area of knowledge.

The brief sketches of the various psychiatric situations that have been presented were offered to clearly identify these situations and to show that they differ in one or several parameters. Thus, there may be differences in the person and position of the observer and the observed, and there may be variations in the aims for which the classification ("diagnosis") is made, or in the principal action patterns inherent in the situation. It must be concluded that to hope that one and the same system of psychiatric nosology should be serviceable in all of these situations is to expect too much. Contrariwise, it is reasonable to assume that multiple nosological systems, each serviceable for one situation but not for others, may be developed without undue difficulties. Indeed, there are some in everyday use today, as for example, the categories of "sane-insane" as used in jurisprudence or "transference-reality" as used in the psychoanalytic situation. The notions of sane and insane pertain to the legal situation and can be correlated with the action-patterns of punishment and acquittal(40). The notion of transference pertains to the psychoanalytic situation and expresses the analyst's inference conerning some aspects of the patient's behavior: to the extent to which it is patterned upon past object relationships that are now re-experienced in relation to the analyst, it is "transference"; in so far as the behavior reflects the patient's current orientation to (external) objects, it is not "transference" but is considered to be "reality-oriented." None of these concepts can be readily applied in other situations, although our so-called "common sense," and the needs of society, often press us, as psychiatrists, to use all available psychiatric notions in every conceivable situation. This sort of tendency has led the psychiatrist to be viewed—both by himself and by others—as a "universal social expert" who can offer "scientific" advice on all manner of problems ranging from how to raise children to how to pick men who will be "safe" political leaders. This "global" (not to say "megalomanic") view of psychiatry not only can not lay claim to being "scientific," but—and this may be even more damaging in the long run—it distracts attention from the truly worth-while advances that have been made, and that are being made, in this field.

All of this, as I have said, runs counter to "common sense," and much of it runs counter to a currently prevalent tendency toward unbridled eclecticism (almost as if this were a "good" thing in itself) as well as to a widespread predilection for a "global" type of psychiatric research (*e.g.*, attacks on the problem of "mental health" or "schizophrenia"). The need for science to deny (or more precisely, to transcend) "common sense" has been repeatedly emphasized, particularly by Bridgman(6). It was cogently re-emphasized recently by Hardin, when he stated,

> In the necessity of discarding 'protoplasm,' biology is now confronted with a painful decision of the sort that faced its older sister science, physics,

vestigations into what Pauling calls "molecular diseases" may prove exceedingly fruitful for our understanding of the physical basis of some aspects of human behavior. It is not in keeping with the spirit of the "scientific attitude," however, to hold out this (or for that matter any other) specific investigative technique as one that promises wholesale solution to a problem as poorly defined as that of "mental disease" (an expression that no doubt will also soon qualify for the title of panchreston).

more than half a century ago—the necessity of denying 'common sense' (19, p. 120).

Psychiatry, too, is confronted with the need to abandon "common sense." Thus "common sense" has assumed that insights gained from the psychoanalytic situation should be *directly* applicable to other situations, for instance to problems of child rearing or to the disposition of criminals in courts of law. Our experience shows that this is *not* possible. So we criticize, in turn, psychoanalysis, parents or lawyers, and refuse to draw the obvious conclusion which is that most psychoanalytic concepts make good sense in the psychoanalytic situation, but their relevance in other situations is a matter for careful and critical judgment. Psychoanalysis is here used for purposes of illustration only. Similar considerations hold true for concepts developed and used in other settings, such as in the state hospital ("manic-depressive psychosis"), in jail ("the Ganser syndrome") or in the military situation ("malingering").

Attention is also called to the role that words that purport to "explain"—when, in fact, they merely "name"—play in psychiatry and in psychiatric nosology. The word "schizophrenia" is singled out as probably the most important of these words. Its secure place in the taxonomy of our discipline, it is suggested, interferes with a better comprehension of the data for which this word allegedly accounts. The notion of "schizophrenia" further lends itself to the creation of a reified picture of this disorder, so that we imagine it to constitute a problem similar to others with which we are familiar in medicine, such as poliomyelitis or arteriosclerotic heart disease. It seems more likely that instead of "schizophrenia" being akin to such serviceable models of "disease," its common bonds are with such panchrestons as "protoplasm" in biology and "ether" in physics. If so, it is useless to search for the "cause" and "treatment" of the "entity" that will account for the observed phenomena now labeled "schizophrenia." Rather, a better comprehension of the "real facts"—if I may be excused for this expression—will probably lead to the gradual disappearance of this word, whose function, like that of all panchrestons, is to fill a scientific void.

In closing, I would like to mention a thought that has occurred to me in reflecting on this subject. It struck me as odd—however obvious it may seem—that our officially accepted nosological system is such that everyone pays lip-service to it, but almost no one considers it satisfactory. Often one hears such statements as "Nosology is a necessary evil," or that "Nosology is the expression of the immaturity of psychiatry as a science." Such utterances are misleading. There is no science without classification. What matters is whether the taxonomic system used is appropriate for the endeavor at hand or not. The present situation with respect to psychiatric nosology may be compared to posting a blind policeman on a new superhighway and then expecting him to enforce the speed-laws. The rules of psychiatric nosology are not only being constantly violated, but they are violated gleefully. Nowadays, a contemptuous disregard for the rules of nosology has even become a part of the cloak of psychiatric authority.

An interpretation of this mode of social behavior would prompt one to assume that psychiatrists behave as if their system of nosology was created by "alien others" for no purpose other than to hinder them. Few feel sufficiently identified with this cause to do work along this line or to inspire their colleagues to change their ways. Yet, if one wants to work, all will agree that social order is better than anarchy. Similarly, nosological order would be better than the nosological anarchy which is our present state. Perhaps this symposium will prove to be the soil from which new nosological orders in psychiatry will grow.

Summary

The thesis of this essay is that most problems of psychiatric nosology, as currently formulated, are refractory to solution because of certain basic ambiguities in psychiatric concepts and operations. Scientific clarity and progress in this area depend upon clear agreement on the following issues: 1. The scope and subject matter that is to be designated as "psychiatry" (*e.g.*, brain, mind, or behavior); 2. The scientific and technical methods that characterize this branch of knowledge (*e.g.*, physics or psychology,

physico-chemical techniques or psychotherapy); 3. The precise nature of the phenomena that we seek to classify (*e.g.*, physical or chemical changes in the brain, social behavior, or behavior toward specific individuals). These are not three separate categories, but represent rather interlocking aspects of what must be, in the last analysis, operational descriptions of specific "psychiatric situations."

It is suggested that we distinguish sharply between the following principal psychiatric situations on the current American scene: the mental hospital, private psychiatric practice (including the psychoanalytic situation), the child guidance clinic, the psychoanalytic training system, military service, the court of law and jail. Illustrative samples of an operational analysis of a few of these situations are presented. A similar scrutiny of the psychiatric situations that characterized the work of each of the principal figures in the history of psychiatry since Kraepelin is suggested and briefly sketched. This mode of approach prompts one to take a more "relativistic" view of psychiatry, by which is meant the appreciation that different observational methods imply differences in the very nature of the observed "material." Thus, global approaches to psychiatry may have to be abandoned in favor of more limited, and socially and methodologically better defined, plans of attack on specific problems. It is further inherent in this line of thought that a nosological system developed in, and appropriate to, one type of psychiatric situation cannot be validly transferred to another, radically different psychiatric situation. This is a principle familiar to us from other branches of science and technology and the various systems of classification that they employ.

Considerations of nosology also prompt a scrutiny of the specific items that are classified. At present, probably the single most important diagnostic label in psychiatry is "schizophrenia." Some epistemological aspects of the problem of schizophrenia are briefly discussed, and it is suggested that this word may now function as a "panchreston" (or "explain-all") which, instead of illuminating, obscures the essential problems that face psychiatry today.

In conclusion, some observations are offered on the currently widespread disregard of nosological rules by psychiatrists and its inhibiting influence on progress in psychiatry.

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PSYCHIATRY IN POST-WAR GERMANY [1]

H. EHRHARDT [2]

Even a brief report of the development of German psychiatry since 1945 should not omit a reference to a dominant tradition, characterized by the names of Kraepelin and Jaspers. Last year we celebrated the centennial of Kraepelin. On this occasion a great deal was written about the significance of his ideas in our time.

We no longer share Kraepelin's conception of human nature. We have lost interest in the nuances of his differentiation of various forms of insanity and, by the way, Kraepelin's schema of the non-psychotic mental abnormalities has never been accepted. On the other hand, the diagnostic classification of the so-called endogenous psychoses, dividing them into the two groups of dementia praecox—now, following E. Bleuler, called the schizophrenias—and manic-depressive insanity—now called cyklothymia—is still widely accepted. Atypical forms as well as borderline cases were also known to Kraepelin. However, he doubted the occurrence of "real transitions" and believed firmly in the basic differences between these pathological processes.

In relation to this problem our views over there are not as divergent as may appear at first glance. Kleist assumes two main groups; he distinguishes "phasic diseases" and "deteriorating diseases" (the schizophrenias), dividing them into about 40 subgroups to which he assigns atypical and intermediate cases. Kretschmer speaks about constitutional and hereditary spheres (schizothym—cyklothym) which, just as they overlap in the area of the normal, may also be mixed in the area of character disorders and of psychoses. Therefore, Kretschmer postulates that atypical cases and intermediate forms which are transitional from schizophrenia to the manic-depressive should be considered as "genuine biological alloys." K. Schneider rejects this assumption: to him such cases are nothing but manifestations of differences within the realm of clinical description.

Kraepelin's heritage, while cautiously modified and further developed by the younger generation, was preserved in its core basically unchanged. This is true also for Karl Jaspers' phenomenologically oriented book on psychopathology, re-issued in 1946 in a fourth revised edition more than 30 years after its first publication. With the attention given to experiencing and its different forms it added many nuances and refinements to the schema of clinical psychiatry as designed by Kraepelin. The emphasis on philosophical distinctions prevails in the new edition of Jaspers' standard work, in accordance with the personal development of the author. Jaspers, a psychiatrist turned philosopher, is one of the leading exponents of existentialism. His basic concept of the opposition of understandable context and causal connection in psychology—a point of argument up to this day—has remained unchanged. Kurt Schneider believes that we will relinquish the system of Kraepelin only when we turn away from the preoccupation with diagnostic problems and face the pathologic experiences and their biographical, psychoanalytic and existential-analytic interpretation. In this opinion Schneider no doubt is right. But in this report we need not evaluate the potential merits of such a break with the Kraepelinian tradition.

Sigmund Freud's centennial in the last year likewise stimulated many to re-examine and re-evaluate the influence of this great psychologist on our present-day psychiatry. It appeared quite obvious to draw a comparison between Freud and Kraepelin, these two personalities who differ in so many respects, each of them, however, eminent in his own way. The innumerable celebrations and publications in scientific journals—no less than in newspapers—indicated that Freud was by no means forgotten in Germany; indeed, in contrast to Kraepelin, he can claim wide popularity. Freud's point of departure was quite different from that of Kraepelin. To him therapy was of major importance

[1] Read at the 113th annual meeting of The American Psychiatric Association, Chicago, Ill., May 13-17, 1957.

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and theory followed; Kraepelin centered his interest on diagnosis. Freud did not deal with the endogenous psychoses until relatively late. There is in German literature only one serious attempt to use psychoanalysis as a foundation for psychiatry of the psychoses. It stemmed from Paul Schilder's pen; written in 1925, it evoked relatively little sympathetic response. The majority of the representatives of academic psychiatry rejected Freud. It may suffice to mention the names of Hoche and Bumke. Kretschmer was an exception. Nevertheless, there was a flourishing psychoanalytic movement in Germany. We must not forget today that the decisive critical discussions on psychoanalysis occurred in Germany before 1933. In this connection the publication of *Krisis der Psychoanalyse* edited by Prinzhorn and Mittenzwey in 1928 should be mentioned.

The rejection of Freud's ideas by the Nazis and their opposition to Freud had nothing to do with science, but had its origin in racial prejudice. There existed, however, during the era of national-socialism a psychotherapeutic movement which—willy-nilly—was based on Freud's ideas, whether this was admitted or not. During this period C. G. Jung was the leading personality.—The psychiatry of Eugen Bleuler has had a great and lasting influence in our country. Bleuler was—as is generally known—positive in his attitude toward Freud's teachings. Indeed, thanks to Bleuler's influence, there exists up to this day in Switzerland a kind of peaceful co-existence and integration between so-called classical psychiatry and psychoanalysis in their different branches (*cf.* Binder, M. Bleuler, Boss, M. Mueller, v. Siebenthal *et al.*).

Regarding the present situation in Germany, we may say that the younger generation of psychiatrists in particular follows with great interest the innovation in psychoanalytic research begun in the United States. These attempts to win an empirical basis for psychoanalytic theory appear to us to be particularly important and indispensable. Of great interest is the sociological branch of psychiatry as represented by Fromm, Horney, Rado, Sullivan, *et al.* In our country there are Buerger-Prinz *et al.*, who endeavor—somewhat independently of psychoanalytic theories—to study the influence of modern sociology on psychiatry and the application of sociological knowledge to psychiatric theory and practice.

For many years we have been more and more interested in the psychoanalytic interpretation of schizophrenic and depressive psychoses and in their treatment by intensive psychotherapy. These attempts re-opened the discussion of an old problem—of an organic basis for at least a pivotal group of endogenous psychoses. By far the majority of German psychiatrists hold to the hypothesis of an essential difference between neuroses and psychoses.—Biochemistry, neurophysiology and neuropathology are considered, with steadily growing emphasis, as the important basic sciences in psychiatry. Some representatives of the younger generation in these branches are Hassler, Jakob, Jung, Peters, Selbach, Zuelch. Research in the field of genetics—completely inactive during the early post-war period—has gradually become more intensive after having been brought into disrepute by the national-socialist regime.

Psychopathological research has acquired new impetus through existential-analysis. It is extremely difficult to present this topic to someone not thoroughly familiar with English, French and German. The philosophical formulations and the terminology of Heidegger and Sartre, which are important for existential-analytical interpretation of psychoses and neuroses, cannot be translated into another language without great difficulty—if at all. The contributions of Binswanger, v.Gebsattel, E. Straus, Zutt, *et al.*, are becoming more and more important in contemporary discussions of psychopathology. The characteristics of man's being-in-the-world, the imprint and significance of our culture and of the impact of our traditions, and in addition the style of our habitation and the power of habit are shown in a new light through existential-analysis. It also leads to a more lucid interpretation of experiencing and of the variations of experience in psychoses. Here we are always dealing with a psychologically understandable context, not with causal connections.

Conrad in his recent work takes a different position. He subscribes to a method which allows one to consider both understandable and causal relations equally well. Motor

aphasia was selected as a model to develop the principles of protopathic gestalt-metamorphosis of functions. The term "prefiguration" aims at a theory which should enable us to order psychological manifestations in their abundance according to the inner principle of psychic structure in agreement with the psychogenic hypothesis and gestalt-theory. In his tenets Conrad resembles the teaching of the French psychiatrist Henri Ey who independently developed a so-called "organo-dynamic" theory.

At present new perspectives—their importance for psychiatry still unpredictable—are being opened in the field of "comparative ethology" through the research done by Lorenz, Tinbergen, *et al.* Their physiology of behavior, oriented towards causes, appears destined to become a mediator between physiology and psychology, between natural science and the humanities. Ethology, equipped with empirical data, may be helpful in supporting and widening the realm of thoughts which were mapped out from a totally different view point by Conrad and by Ey. It may finally contribute to a solution of the vexing questions of whether and how far psychoses, or psychotic symptoms in particular, signify only dis-inhibition from innate forms of behavior (instincts), caused through the disorder and subsequent reduction of power of more differentiated structures at the more highly developed levels of the personality (*cf.* Tloog *et al.*).

Finally, I should mention the rise and growth of child psychiatry during the post-war period. Through the initiative and leadership of Villinger, who has worked for decades to advance the field of child psychiatry in theory and practice, Western Germany was provided with a network of child guidance clinics (*Erziehungsberatungsstellen*). In principle they have been built after Anglo-American patterns. They use a team consisting of a doctor, a psychologist and a social worker. The first teaching chair of child psychiatry (Stutte) was recently established at Marburg University.—Unfortunately, social psychiatry is still suffering from a lack of funds; it also is without extensive or large scale planning. There is no systematic, psychiatric outpatient program and there is no follow-up plan; both these welfare programs had been totally neglected during the national-socialist era. The equipment of our psychiatric hospitals, on the other hand, has been substantially improved in recent years. Therapy of psychoses with chlorpromazine and reserpine has limited the application of shock therapy, especially in our mental hospitals but not so much in the university clinics. Psychosurgery never was widely used.—The legal regulations concerning admission and discharge of patients put our psychiatric institutions under formidable stress; these regulations were issued after the war in accordance with certain stipulations of our new Constitution. Born out of an extravagant interpretation of the idea of personal freedom, understandable in the peculiar circumstances of the post-war period, these regulations seriously disturb the doctor-patient relation, and they undermine the mutual confidence which is so important for the psychiatrist.—Time does not permit to discuss in more detail these and other aspects of psychiatric practice.

No-one who has a first hand knowledge of the development of psychiatry in post-war Germany would claim that we are dealing with a merely static psychiatry in contrast to a psychodynamic psychiatry. As a whole, our psychiatry in research, teaching and practice even today bears the decisive imprint of tradition. To many of our American colleagues and friends this may be a little too much tradition. Yet they should keep in mind that we have just passed through a radical crisis of confidence. These distressing experiences made us cautious and somewhat reserved. Perhaps one day this conservative traditional feature of our psychiatry may turn out to be a positive factor for a future international psychiatry, which for many reasons seems to me to be of the utmost necessity.

AN ENGLISH VIEW OF AMERICAN PSYCHIATRY

MICHAEL SHEPHERD, D. M.[1, 2]

"It has been difficult," said Dr. Whitehorn in his 1951 Presidential Address to The American Psychiatric Association, "for many European psychiatrists to understand the American situation(25)." He could not have meant to imply that they lack interest in the subject. On the contrary, during the present century the growth and influence of American psychiatry have so increased that to psychiatrists elsewhere a visit to North America has come to constitute an almost indispensable part of their post-graduate education. For financial rather than medical reasons it is unfortunately an experience which has been enjoyed by only a small minority, and without this opportunity the opinions of the European psychiatrist must depend on the conflicting reports of his more fortunate colleagues and on the torrent of American publications. Accustomed to a more centralised tradition of medical training and research, usually with the university clinic in the foreground, he is hard put to it to understand the many, diverse and possibly unfamiliar institutional forces—State supported institutes as well as university centres, federal agencies like the United States Public Health Services, voluntary organisations like the National Association for Mental Health, private hospitals and clinics and the great foundations—which influence the form and direction of American psychiatry to-day. Perhaps it is inevitable that many European psychiatrists, seeking for some uniformity amid seeming chaos, have tended to heed only the most clament of many voices and have assumed, again in Dr. Whitehorn's words, that ". . . the psychoanalytic movement has captured American psychiatry."

Among the European schools of psychiatry that of Great Britain has a close traditional link with North America. Between the wars many of the most eminent British psychiatrists made their pilgrimage to the Henry Phipps Clinic, and Adolf Meyer handsomely acknowledged the contribution of British to American psychiatry in the 14th Maudsley Lecture(20). Describing his impressions of North American psychiatry more than 25 years ago one British professor concluded that ". . . the future is more secure in America than in any other country(19)." More recently, however, there has been evidence of what another British professor has termed "differences . . . of quantity and tempo" between the psychiatric developments in the two countries(17). Some of these differences have found clear and even sharp expression in publications from both sides of the Atlantic. Dr. Freyhan, however, in his recent sympathetic review of European psychiatry concludes that American psychiatrists are as likely as their European colleagues to be struck by the unfamiliarity of what they find on leaving home(12). Indeed, he goes so far as to stress Professor Bleuler's warning that a breakdown may occur in communication between psychiatrists on the two continents. Such a situation is unknown in other branches of medicine, and it cannot but be deplored. Dr. Freyhan's article also makes it evident that the best in European psychiatry is of interest to American physicians not only by virtue of its intrinsic quality but also because of the light it may reflect on domestic problems. Ample confirmation of his opinion was provided during the year which the author was privileged to spend as a Postgraduate Travelling Fellow in the United States,[3] when many of these problems were frequently raised in discussion with American colleagues. The discussions proved invaluable for the purpose of clarifying many obscure aspects of American psychiatry; they also helped make possible the formulation of some general views about it. Incomplete as such views must be, they have been summarised here in the hope that one observer may have been able to see something of interest to the participants.

Many of the misunderstandings which

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have arisen in other countries about American psychiatry spring from a failure to understand the social setting in which the subject is practised(15). It is widely recognised that the content as well as the form of psychiatric practice is moulded by environmental factors. This complex issue can be illustrated by reference to the distribution of psychiatrists working respectively in the public service and in private practice. In England psychiatry, as a branch of medicine, comes within the orbit of the National Health Service; the bulk of the working time of British psychiatric consultants is devoted to salaried service in hospitals or other public institutions and private practice must consequently assume less importance in the majority of cases(1, 21). The efforts of the British Ministry of Health to improve the quality of mental hospitals and to develop them as dynamic centres of community service have been dependent on a supply of well-trained and often highly qualified physicians; to them are due the more liberal use of voluntary legal status, the development of domiciliary consultations, and of out-patient clinics, the experiments with the "open door" and the "therapeutic community," and the emphasis on rehabilitation(7, 16, 18).

Medical care in the United States is organised very differently. Nearly 3,000 of the 7,500 recognised psychiatrists in 1951-52 listed private practice as their major activity(5). By 1954 Davidson has shown that the private practitioners for the first time outnumbered their colleagues in salaried positions; further, one-quarter of them were engaged exclusively in the practice of psychotherapy and were not considered to ". . . meet the traditional criteria of the practice of medicine(8)." (These figures, of course, take no account of the large number of non-medical psychotherapists practising in the United States, but they have very few counterparts in Great Britain.) It is thus apparent that proportionately fewer American psychiatrists are in salaried public service and their role and functions are correspondingly modified.

A trend of this nature has other implications. Since no form of medical education can be dissociated from the purpose to which it is being put, the organisation of psychiatric practice patently exercises a profound influence on psychiatric training. At the present time it is difficult to avoid the impression that to a substantial number of young American psychiatrists several of the major professional incentives—public status, mode of living and financial reward—are associated far more with private practice than with hospital work. From years of experience with a residency training programme in Massachusetts, Barton and Yakovlev reported the ". . . reluctance of residents to accept even financially attractive appointments in the geographically isolated state hospitals and even in many of the training-wise self-contained institutions(4)." The specialist therefore understandably demands that much of the curriculum should be devoted to psychotherapy and psychodynamic theory. His relationship with his supervisor often constitutes the corner-stone of his instruction(23). Conversely, there is a distaste for the tracts of detailed knowledge dismissed as "descriptive psychiatry"; an antagonism to many of the facts and concepts associated with the study of heredity; a neglect of much biological investigation; and, as Kanner has so strikingly shown, in many centres a biassed ignorance of the evolution and the historical roots of modern psychiatry(14).

To an English observer the problems and experiments in psychiatric education in America seem to be of cardinal importance. On the one hand he is impressed by the generous allowance of time afforded to psychiatric instruction in the undergraduate years and by the high status of the subject in many medical schools, even if he takes Professor von Baeyer's estimate of American psychiatry as ". . . Königin unter den übrigen ärztlichen Disziplinen(24)," to be the comprehensible hyperbole of an admirer. Yet American views on the nature and purpose of psychiatric education are still conflicting and are sometimes uncompromisingly critical (6). The visitor is not entitled to pass judgment but he may legitimately ask whether the frame of reference which is most widely endorsed in many centres of training is broad enough to encourage the inter-disciplinary co-operation which is clearly needed for psychiatric progress. The dangers of a re-

stricted viewpoint have been illustrated in the past 3 years: the frosty reception given to the newly introduced "tranquillizing" drugs by psychiatrists with a bias against physical forms of treatment has been matched by the enthusiastic use made of the drugs by psychiatrists of a different persuasion(2). In many scientific fields work bearing on psychiatric problems has bombarded the clinical psychiatrist with data, theories and speculations, mined from the rich seams of the social and laboratory sciences, psychology, statistics and public health, to name only the more important. The contribution of the investigators in these fields constitutes the most hopeful and the most challenging feature on the American psychiatric scene: it demands continual assessment by clinical psychiatrists who are in danger of becoming passive, if receptive, junior partners in what should be a joint enterprise of collaboration. More is now demanded of the psychiatrist than a medical background, an administrative proficiency and a close acquaintance with one concept of individual psychopathology. "Research has become big business" according to the head of the Biological Sciences Division of the Office of Naval Research(22), and as very large sums of money become available, psychiatrists are being led or induced to assume a different role from that to which most of them have been accustomed.

Fortunately, there is no reason to believe that any single viewpoint can long dominate North American psychiatry. The 1956 centenary celebrations of Freud's birth demonstrated the high standing of psychoanalysis in the country but did not conceal the restless dissatisfaction which exists not only among the small number of avowed antagonists of the psychoanalytic movement(3) but also among its proponents. In Great Britain psychoanalysis has been in contact with, rather than a part of, academic psychiatry: its concepts have been transmitted through a semi-permeable membrane of critical examination and testing, and the rate of absorption has been slow. In the U.S.A. a remarkable attempt has been made in many centres to ingest the whole system, python-like, into the body of academic opinion. The post-prandial reaction seems now to be leading towards the elimination of indigestible matter and waste products: in evidence are the pronouncements of leading psychiatrists like Whitehorn and Appel; the new stress being laid on the psychotherapeutic method as a research tool; the supplementary investigations of the psychotherapeutic process itself; and the experimental testing of many psychodynamic hypotheses, though for much of this work the credit must go to psychology rather than to psychiatry(13). It seems highly probable that what is of lasting value in psychodynamic theory and practice will find its way into both British and American psychiatry; the difference lies in the tempo, and in the route which is being taken.

There is, however, only a partial view of American psychiatry to be obtained from contact with the medical and allied professions. Since the early days of the mental hygiene movement psychiatry has entered into the fabric of American life in a way unparalleled elsewhere and which finds expression to-day in the widespread quest for "mental health." No one interested in mental illness can disregard "mental health" which, although it eludes all attempts at definition, remains a live and vigorous concept. To the visitor it seems that "mental health" would become a less nebulous objective if three separate uses of the phrase were always distinguished. "Mental health" is employed first as a euphemism for mental illness, and may as easily screen an inquiry into schizophrenia as into schools. Secondly, and more legitimately, it designates the campaign for the viewpoint of those workers who apply skills developed in the field of public health to psychiatric problems; workers for "mental health" in this sense concentrate on the group rather than the individual as the unit of study, conducting morbidity and other surveys and paying close attention to the principles of epidemiology and statistics. But in its third guise "mental health" can be understood only by identifying what one authoritative subcommittee has termed ". . . the flavour of morals and ethics, religious fervour, personal investment, unvalidated psychological concepts, value judgments, psychiatric theory, political science, welfare movements, and cultism(11)." It is more likely to be the task of the social historian than of the psychiatrist to analyse the full

range of "mental health" activities in America today. Meanwhile the sociologists have begun to clear the way(9, 10, 26). Psychiatrists should follow their progress closely if they wish to grasp the social implications of their own activities.

The signs augur a phase of self-examination and reassessment in American psychiatry. It is to be hoped that the forthcoming report of the Joint Commission on Mental Illness and Mental Health will indicate the direction which is to be taken. Whatever that may be, it is certain to influence those of us who work in other countries and who will hope to profit from the achievements and even the mistakes which will ensue. Meanwhile the achievements of British psychiatry in recent years testify to the progress which has been made and illustrate the shaping of many advances by social factors. No psychiatrist concerned with the welfare of his subject in either country can surely doubt that a closer professional and personal interchange will result in mutual benefit.

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CORRECTION AND RETRIBUTION IN THE CRIMINAL LAW

LAWRENCE FRIEDMAN, M. D.[1]

It is impossible not to sympathize with Dr. Richard Board's effort to establish a criterion of criminal responsibility devoid of moral judgement (Am. J. Psychiat., 713: 332, Oct. 1956). The approval which the article will doubtless compel from enlightened readers witnesses the shift of concern from judgement to correction that so regularly follows increased understanding. Different human interests make different uses of old institutions, and criminal jurisprudence is showing an undeniable tendency to regard itself as a doctor of society. In this role it will be assisted by Dr. Board's clarification of therapeutic rationale. However, psychiatrists have found by painful experience that advice is effective only to the degree that the advisor both understands the problem presented to him, and the perplexity from which it arises. It would seem that Dr. Board, in reflecting the new interest in correction, has permitted a certain relaxation of these requirements, and has overlooked considerations appropriate to his role both as psychiatrist and operational philosopher.

I

As a philosopher Dr. Board proposes that moral responsibility be discarded as a concern of the law because "moral responsibility [is] an idea having a metaphysical content dealing with free choice between the values of good and evil," whereas "the law constitutes an operation exclusively confined to the natural world of cause and effect." Though briefly stated and undefended, the first assertion is as controversial and unsettled as an assertion may be. It is familiar as the argument used by a group of critics to impeach the ethics of modern psychiatry. Psychiatrists, as good citizens, are wont to protest that the causal link between a person's actions and his total personality, far from excusing his behavior, is the prime requisite for attaching moral responsibility, which could not sensibly be attached to a freakish, spontaneous act totally unrelated to the personality(3). It is this fact to which Freud refers when he says "Obviously one must hold oneself responsible for the evil impulses in one's dreams. In what other way can one deal with them? Unless the content of the dream . . . is inspired by alien spirits, it is part of my own being"(1).

But if it is an error to regard moral responsibility as opposed to cause and effect, it is no less so to regard the law as "an operation exclusively confined to the natural world of cause and effect." For the law is not principally concerned with establishing what is and has been, nor in predicting what will be, but rather with the use of these in deciding what *should* be. Following the example of the law, Dr. Board himself steps outside the natural world of cause and effect and there finds that what is "worthy" of society is correction rather than condemnation and punishment.

This is a suggestion for which we should thank him if he recognized it as a suggestion. As the "operational meaning or 'cash value' of the concept (of criminal responsibility)" we are more likely to find ourselves somewhat suspiciously counting our change. For example, Dr. Board's operational analysis of criminal procedure reveals to him the workings of protective, corrective and humane principles, and something else which he calls "vengeance to the criminal." Although this last is apparently to be found in the operation of the law, it is not therefore, as you might expect, a part of its operational meaning. It is a "contaminant." This strange qualification of an operational concept (in which the metaphysician will recognize the old "accidental attribute") is required because the investigator finds such aims "rejected as unworthy of society,"—rejected, evidently by Dr. Board, since they are retained as contaminants by society. Such an operational analysis, which includes the import of some operations and excludes the significance of others, resembles not so much operational philosophy as it does operative surgery. Post-operatively a contaminant is

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all that remains to the criminal law of the concept of Justice which afforded it such satisfaction in better days. If we agree to this we must be convinced that talk of retribution and debts to society is a rare and uncharacteristic way of referring to criminal responsibility.

Radical surgery, of course, has its indications and Dr. Board is obviously more interested in finding a workable meaning of criminal responsibility than elucidating the common meaning. Accordingly he states that "while these [his own] value judgements may have metaphysical origins, carrying them out requires scientific rather than metaphysical conceptions." If there is no way of applying common concepts, they must be excised. But is there not a sense in which the law can be considered an operational definition of moral responsibility? The problem of workability only arises with recent attempts to make exceptions to what has in criminal law been an obviously retributive system (and which remained so long after it recognized insanity). It is a discomforting thought that the problem of how to be more discriminating in applying the concept of moral responsibility is here solved by eliminating the entire concept. One can almost sympathize with those who learn from this not to discriminate.

We have here one further example of the failure (well illustrated in modern philosophy) to distinguish between explication and legislation. Explication is the replacement of a vague and shadowy notion with a clearly defined concept that comes as close to it as a clear concept can come to a vague one. If that vague notion is sufficiently obscure and its import distasteful to the explicator, he will be overwhelmingly tempted, while concealed in the dark, tortuous alleys of confused meaning, to secretly assassinate the offending concept and sponsor forth some favorite imposter in its stead. Legislation is so much simpler than explication and can look so like it. But perhaps of all philosophers, it is the operationalist who should have the greatest patience with the vaguenesses of the law, for this at least is already a set of operational definitions and having anticipated, so to speak, the greatest part of the analysis, may be permitted its gaucheries and inconsistencies; if it had none the operational philosopher would have no job. Part of this job is to determine by the uses of the law, why certain wrongs are exempt from the need for retribution. To say that all are exempt, as Dr. Board does, is to abandon explication for legislation.

II

But if, as philosopher, Dr. Board should have seen how intrinsic the notion of retribution is to the criminal law, as a psychiatrist he would be expected to recognize how retributive is the punishment demanded by the conscience of the people whose law, after all, it is.

When Dr. Board asks "Where in the range of psychodynamics does moral responsibility suddenly or gradually appear?," his rhetorical question exposes itself to an answer. To be sure, and this is his main contention, nowhere do condemnation or moral directives appear as statements of psychology, but they do certainly appear *in* statements of psychology, and it is in psychology that these moral directives first receive their meaning(2). This being so, the psychiatrist is in the very best position to appreciate those retributive, punitive requirements of the mentality that creates the law. To nevertheless ignore them in the created law is as much a disservice and as ultimately futile as to pretend that people's consciences can serve solely as a guide to better behavior and never as a source of remorse or indignation.

But not only will the wise psychiatrist thus confirm what the careful philosopher finds in his analysis of criminal law; he will have the additional advantage of anticipating the confusion and contradiction seen in its application. He daily points out the ambivalence and complexity of what his patients consider to be fairly simple attitudes. He should not be the last to recognize that an institution like the law is used to implement many social aims, any two of which would be entirely consistent and compatible only by the most extraordinary accident. As a psychiatrist it better suits him to instruct the public in these divergences than to conceal them behind a false rationalization. The apparatus

of the law is used for marriage counseling, child-rearing, psychiatric steering, social change. It is also used to avenge injustice. Depending on the temper of the times some of these aims may eclipse others. Eclipsed aims however vanish no more readily than repressed ideas, and will not be exorcised by labeling them contaminants. To say that "punishment as a method of rehabilitation is given in the same educative spirit as in punishing a child" is to say that punishment is only rarely a method of rehabilitation. Witness the remarks of the magistrates who dispense the greatest quantity of justice in our culture.

The lesson to be learned from Dr. Board's interesting attempt to rationalize the law by heeding only its protective and corrective aims is that the search for the compound of conflicting interests served by the law cannot be impatiently replaced by a simpler reconstruction. Such a reconstruction is irrelevant to the need the law fills, which is to bring society's complicated aims to just that kind of expression demanded by their relative weights. Opinions based on an autistic law created by the expert will be properly held, in the apt words of Dr. Board's quoted opponent, not "responsive to the question the jury must answer."

The only fruitful method is to continue the difficult and frustrating attempt to follow out all the hints that the exercise of the law provides. If there is a difference between society's attitude to the child, where punishment is educative, and its attitude to the adult criminal, this is operational evidence that culpability in the law has some relation to psychological development, and it provides operational hints as to what qualifies moral guilt in the mentally ill criminal. Does an ego require a certain integration before guilt seems appropriately applied to it? In punishing are we interested in counterbalancing an action reflecting a wrong sense of values, and do we therefore require a minimum of apprehension of facts or reality-testing in order to insure that the distortion is really one of values? Are we perhaps offended by only certain kinds of wrong value pictures? Whatever the answers, we will not discard them for inconsistency, since we know beforehand that under certain circumstances we will exercise sympathy where we might indignation, and that people will sometimes be more concerned about therapy than justice.

Summary and Conclusions

Dr. Board's objectives can only tend toward a happier society. His failure to distinguish between suggestion and analysis prejudices his worthwhile objectives in the following ways:

1. It leaves him unarmed against the resistences of society which go unrecognized.

2. It compromises the effect of the psychiatrist's most potent weapons,—expert advice and education, by concealing them in a tendentious special plea for the values of the psychiatrist.

3. In the manner of so many current political positions, it blurs the meaning of society's conflicting values by insisting that they are perfectly realized in the tissue of compromises and violations that alone can give them expression.

4. Finally, one suspects that there will come a time when the psychiatrist, accustomed to the stationary ethical foundation he has artfully built and unprepared for the heaving sea of felt principles, will feel in himself the upsurge of the rejected "contaminant" and be overcome by a moral malaise without remedy.

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REPLY TO DR. FRIEDMAN

RICHARD G. BOARD, M.D.

In my article, "An Operational Conception of Criminal Responsibility," I tried to be as specific and precise as I could so that any inconsistencies in logical development would be easy to spot. Dr. Friedman believes that he discerns such mistakes. I hope that my objections to his objections will reassure him that I am not unfamiliar with the issues he has raised.

To begin with, Dr. Friedman points out that I did not document my assertion that the concept of moral responsibility was a metaphysical rather than scientific idea. I didn't think it was necessary to prove it for several reasons. First, what moral responsibility is, or is not, was not a central issue in my article which was concerned with setting forth an alternative to that vague idea. Second, while the subject may still be disputed by system philosophers, I believe that it is no longer taken seriously in science. For example, in one of the very articles cited by Dr. Friedman, Dr. Robert Knight makes it abundantly clear that any concept involving free choice has no place in scientific theory.

Dr. Friedman's next objections result from his failure to differentiate between criminal law as a system of proscriptions about behavior and the procedure of applying this system in the courtroom. For he quotes me as saying "the law constitutes an operation exclusively confined to the natural world of cause and effect" whereas the statement was: "the administration of the law constitutes etc." However Moses got his commandments, he had to descend the mountain to administer them in the valleys of cause and effect. Replacing a metaphysical ritual in administering criminal law by a deterministic, scientific procedure does not involve throwing away the value judgments such as justice blueprinted in the laws to be administered.

In the midst of this confusion, Dr. Friedman introduces a quotation from Freud in order to show that moral responsibility has something to do with cause and effect. Please note that Freud uses the term responsible rather than morally responsible. What does responsible mean in this context? To clarify this, let me translate the quotation into more precise language: "Obviously, a constellation of forces within the individual results in the 'evil' impulses in his dreams. What other forces can cause them? Unless the content of the dream . . . is inspired by alien spirits, the location of these forces causing the dream is within the dreaming individual." Perhaps also implied is this: "And so it is to this individual and these forces that we apply the forces of therapy." Now certainly this statement is naturalistic enough. With but slight modifications it could apply to almost any animate or inanimate event. In this sense, a landslide is responsible for obstructing traffic and a murderer is responsible for his victim's death. "Responsibility" is used as a way of referring to cause and effect linkage and to locate the forces involved within a certain individual. And it means no more. But this is not the moral responsibility of the courtroom nor the criminal responsibility founded on that concept. If it were, how could we find even the sickest dreamer "irresponsible." If this kind of courtroom responsibility indicates causal linkage between actions and the personality, who could ever be judged irresponsible? What causes the "freakish, spontaneous act totally unrelated to the personality"—an alien spirit? As scientists we would do well to drop the whole idea of responsibility. It isn't needed to get things done with everything in the universe except human behavior and it isn't needed to get things done with human behavior. In my article the quantitative operational concepts of deterrent efficiency and efficient punishability replace the confusing idea of criminal responsibility.

Dr. Friedman's concern that I may have introduced some value judgments of my own in pronouncing retributions or vengeance an unworthy contaminant in the judicial process seems to stem primarily from his failure to appreciate that there are 3 general levels involved in criminal law. First, there is the blueprint for behavior, the laws themselves. Second, there is the blueprint of how to administer the laws. Third, there is the administration of the law by the all too human

judge and jury. My paper concerned the second level, the blueprint of how to administer the law, explicating the current value systems involved and the logic of their application to the natural world of criminal behavior. Regarding the value judgments inherent in the blueprint for administration, my point was that they have gravitated away from retribution and toward correction. Such things as public hangings, floggings, cruelty toward the imprisoned and other food for vengeance are discouraged these days because of this change in values regarding the administration of the law. Retribution and vengeance toward the criminal still flourish, as Dr. Friedman points out, but only at the third level, the all too human performance in the courtroom. But they are continually hedged in and circumscribed by the blueprint of administration. I say all too human because the law and the blueprint for its administration seek to be better than any man—more impartial, less vengeful, etc. This is one reason we prefer a government of law rather than men and regulate the administration of law rather than trusting too much to the emotional vagaries of judge and jury. In regard to the trend in values characteristic of the blueprint for administering the law, the emotions of judge and jury, vengeful or otherwise, stand as contaminants in the judicial process of government by law. In view of the progress already achieved in circumscribing these contaminants, Dr. Friedman need not be too pessimistic about further improvements.

Next comes Dr. Friedman's assertion that I was too selective in my operational analysis of criminal procedure in conspicuously omitting vengeance toward the criminal. I have already indicated why this portion turns out to be a contaminant in regard to enlightened administrative blueprints. But Dr. Friedman's conception of operational analysis intrigues me. Unfortunately, there has been a trend toward broadening the concept of operational analysis since Bridgman first formulated it until it can cover almost anything. Thus it is becoming a favorite of philosophers. It is possible that Dr. Friedman, in his role of careful philosopher, has achieved the *reductio ad absurdum* for this trend. As I get it, he seems to feel that any vague idea can be operationally analysed—even the magical rituals of the primitive, I would suppose. But there are concepts that are operationally meaningless and in such cases there is no alternative but to legislate rather than explicate. I regard moral responsibility as just such a concept. The fact that an elaborate courtroom ritual exists whereby it is supposedly applied confers no more operational validity upon it than conceiving of golden mountains will make one rich. As I indicated explicitly in my article, I set out to redefine criminal responsibility and made no bones about the fact that I was not intending an operational analysis of moral responsibility. I don't think any is possible. Dr. Friedman need not fear that the concept of moral responsibility will be assassinated in "the dark, tortuous alleys of confused meaning." That is where it thrives.

Regarding correction *vs.* retribution as an aim of the law itself, I am reminded of Professor Stace's observations on the subject. The impositionist theory, personified by Moses obtaining the law from God, holds that laws are imposed on mankind from without. The immanent theory holds that laws are evolved by mankind. Science has tended to confirm the latter. The law is viewed as an institution evolved by societies to maintain themselves. As adaptive mechanisms the laws and even the idea of retribution are corrective mechanisms maintaining society. Like many corrective mechanisms, retributive law is as inefficient in the long run as a neurotic symptom.

Having been jumped so frequently between the roles of philosopher and psychiatrist in Dr. Friedman's paper, I would seek final asylum in his role of wise psychiatrist. He had some nice things to say about my article before the inevitable, "however," and this suggests to me that our agreement may be more extensive than our differences. In turn, I have had to be abrupt and unconstructive. I hope that both of our discussions will stimulate further study of my article.

SOME PSYCHIATRIC NOTES ON THE *ANDREA DORIA* DISASTER

PAUL FRIEDMAN, M.D.,[1] AND LOUIS LINN, M.D.[2]

On July 25, 1956, at 11:05 p.m., the Swedish liner *Stockholm* smashed into the starboard side of the Italian liner *Andrea Doria* a few miles off Nantucket Island, causing one of the worst disasters in maritime history. The authors were passengers on the Europe-bound *Ile de France* and spent approximately twelve hours, independently, interviewing and observing the survivors, the crew of the *Ile de France* who participated in the rescue operation, and the passengers aboard the *Ile de France*. It must be noted that the cause of the disaster was purely a matter of speculation at the time and there was no factual basis for establishing culpability for it. Subsequent inquiries succeeded in establishing the circumstances of the accident, and the authors are gratified that their observations can now be measured in terms of confirmed facts and thus assume more realistic value. For, as psychiatrists and psychoanalysts who happened to be on the spot, we were in a unique position to make immediate observations. Our data, carefully recorded after interviews with a large number of people, do not constitute a systematically scientific study of the experience, but may represent a modest contribution to the psychology of disasters.

THE STATE OF INITIAL PSYCHIC SHOCK

The emotional state of the survivors may be divided into two distinct phases: the state of initial psychic shock and the recovery phase. During the phase of initial shock the survivors acted as if they had been sedated. It is noteworthy that but a minimal quantity of sedative medication had to be administered during this time. Thus, it was as though nature provided a sedation mechanism which went into operation automatically in most cases. The survivors presented themselves for the most part as an amorphous mass of people tending to act passively and compliantly. They displayed psychomotor retardation, flattening of affect, somnolence and, in some instances, amnesia for data of personal identification. They were nonchalant and easily suggestible.

Comment.—The attitude of helpless dependency identifies this condition as a state of emotional regression in which people who are normally capable of functioning on an emotionally mature, adult level become childlike in their feelings of personal inadequacy and in their tendency to overestimate the powers of those offering help and leadership. In their state of shock, the survivors of the *Andrea Doria* could be compared to the survivors of the concentration camps who were found to have developed a state of affective anesthesia as a defense against the dangers and anxieties to which they were continuously exposed(7, 8). As early as 1918, the same reaction pattern was observed by Jones (9) as well as by Ferenczi, Abraham and Simmel(2) in victims of war shock; and when Freud(5) spoke of a "protective barrier against stimuli" (*Reizschutz*) he actually defined a mechanism which is probably mediated by the ascending, activating reticular system which protects the central nervous system when exposed to stimuli of excessive intensity. Because of this protective mechanism the survivors of the *Andrea Doria*, at first, could not be approached or induced to talk.

THE PHASE OF RECOVERY

After their initial shock had worn off, it became possible to question the survivors. As a matter of fact it was usually unnecessary to ask questions, since so many of them had a great need to tell their story. And they did tell their story, over and over again, to anyone who would lend a willing ear. Characteristically they showed pressure of speech and an apparently compulsive need to tell the story again and again, with identical detail and emphasis.

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Comment.—We were impressed with the similarity between these repetitive narratives and the repetitive dreams of the traumatic neurosis. Each represents a psychological reliving of the trauma, as part of an attempt to master an experience that had proved overwhelming.

PREJUDICES AND PARANOID ATTITUDES

We were struck by the frequency with which the survivors who spoke to us were angered. They expressed certainty that the accident was the fault of the *Andrea Doria,* even though the details of the catastrophe—such as the extent of the survivors' misery, the irreparable loss of the beautiful ship, the relatively intact state of the *Stockholm*—favored sympathy on behalf of the *Andrea Doria.* This prejudice was based on the *a priori* acceptance that Swedes are dependable, faultless sailors and people of impeccable integrity and reliability, while Italians on the other hand are childlike and irresponsible, tending to pursue their pleasures instead of their duties.

Comment.—It is interesting to remember at this point that during hearings investigating the causes of the *Titanic* disaster in 1912, the term "Italian" was freely used as a synonym for "coward." "There were various men passengers," declared Steward Crowe of the *Titanic* at the U.S. inquiry, "probably Italians, or some other foreign nationality other than English or American, who attempted to rush the boats." This contention, proven false, formed the basis for a successful libel suit against this officer. It is also somewhat ironic to recall that in his book on the *Titanic* disaster, *A Night to Remember,* published less than a year before the *Andrea Doria* catastrophe, Walter Lord(11) expressed the view that some of the prejudices of the age went down with the *Titanic,* notably the belief in the superiority of Anglo-Saxon courage. Such a notion was proved overoptimistic by opinions voiced aboard the *Ile de France.* The absolute necessity for finding a scapegoat, for locating somebody who was at fault, found at outlet once again in the paranoid projection of prejudice on the part of people on the *Ile de France;* not only demonstrating that stereotype thinking is still prevalent, but dramatizing its capacity to dominate opinion during periods of crisis and its influence in distorting perception and judgment.

Such attitudes are familiar expressions of the quest for a scapegoat, a psychological device for turning aggression outward. It is part of the overall attempt to master an overwhelming trauma. The survivors' tendency to blame the *Andrea Doria* for their misery derived from their feeling of having been failed. They suffered a narcissistic injury which may be compared to the feelings of a child who finds that the strength of his father has turned out to be a fallacy. Let us not forget that the *Andrea Doria* had been considered unsinkable, which conveyed a great sense of security in her passengers; yet there they were having to abandon her and being abandoned by her, experiencing the inability of a parent to cope with disaster.

The facts are that the crew of the *Andrea Doria,* with the expected exceptions, acted with generosity and even heroism. It has been recorded by Cornelius Ryan(13) in an article for *Collier's* and by Walter Lord(12) in an article for *Life* how an Italian cabin-class waiter and several Italian crew members cooperated in trying to free the wife of a passenger from beneath a collapsed partition, spending five hours in the futile effort. Many other instances of helpfulness and altruism on the part of crew members are on record, leaving no basis for condemnation.

Expressions of prejudice were not confined to fixing the blame for the accident on the *Andrea Doria,* but also manifested themselves in the contempt voiced by some passengers on the *Ile de France* toward Italian immigrant survivors because of their uncontrolled demonstrations of despair. To some who expressed these feelings it was explained that patterns of emotional expression are culturally determined and that they vary, in a given national group, from one economic stratum to another. It was also indicated to them that the control of emotional expression under stress is not a reliable measure of courage and strength of character; furthermore, that from a psychiatric point of view the expression of one's true feelings, particularly during bereavement,

serves a useful adaptive function in the mental health of the individual.

Such opinions among *Ile de France* passengers thus were clearly based on paranoid projections of stereotyped prejudice, in contrast to the reactions of the rescued whose resentment toward the *Andrea Doria* stemmed from the violent destruction of their sense of security and dependence.

THE PROBLEM OF COMMUNICATIONS

The most frequently voiced charges were: that no announcement had been made about the nature and gravity of the accident, and that no concerted rescue effort was made.

Comment.—These have been answered by the fact that the first impact of the collision caused a power failure on the *Andrea Doria,* putting the public address system out of commission. Moreover, the ship rapidly developed a severe list which, coupled with oil slicks on the decks, made it imperative for each person to save himself from sliding into the sea. These circumstances also made it almost impossible to circulate information on foot. As a matter of fact, Italian crew members did make their way about on the sharply inclined decks, urging passengers to remain calm, and there was indeed very little panic.

LEADERSHIP

The foregoing facts compel a consideration of the problem of leadership in crises. Because of the conditions on the *Andrea Doria* just described, groups of people were largely immobilized and isolated; this created a necessity for each group to evolve its own leader. In several instances, priests and nuns stepped into the breach. By virtue of their training they were prepared to do so, just as the predominantly Italian Catholic immigrant group was prepared by training to accept their leadership. Primarily they participated in the practical problems of the rescue operation, only secondarily providing religious solace to those who asked for it. In other groups there were individuals not otherwise identifiable who likewise assumed leadership voluntarily.

Comment.—The willingness of some people to assume leadership of a group in disaster situations has repeatedly been observed, and a systematic study of such individuals might help us to identify the qualities that make for leadership, enabling us to concentrate our civil disaster training on such persons. The existence of a corps of trained people endowed with qualities of leadership may make the difference between success and disaster in community emergencies. A leader who understands the psychological importance of identifying with a group, as a device for combatting feelings of individual helplessness and despair, will make use of techniques which promote positive group action. Not only is effective leadership the most important weapon in combatting mass hysteria, but, as stated by Sperling(14), mass hysteria as such can be defined as a failure of leadership. Whether a group reacts to a crisis with self-control and cooperation or with egotism and chaos depends almost entirely upon the quality of leadership, and the vital importance of developing able leaders is well illuminated by Freud's(6) statement in the *New Introductory Lectures on Psychoanalysis:* "A psychological group is a collection of individuals who have introduced the same person into their super-ego, and on the basis of common factor have identified themselves with one another in their ego."

CHILDREN IN DISASTERS

The application of the "women and children first" principle on the *Andrea Doria* resulted in some poignant and, in at least one case, tragic separations and isolations. It can be said that this principle, which prevails in our culture during catastrophes, frequently results in the isolation of children from their parents with possibly disastrous psychological consequences.

Comment.—This view finds ample support in the Freud-Burlingham(4) reports on *War and Children.* During the bombings of London in World War II it was repeatedly observed that children exposed to extremely violent bombing scenes, even those partly buried by debris, showed no particular signs of having been affected if they were in the care of a parent during such incidents. Bombed-out children would arrive at a shelter, in the middle of the night, showing no

undue disturbance when accompanied by parents or by familiar parent substitutes. Serious psychological disturbances were confined largely to children separated from their parents during such experiences. It was the main conclusion of the Freud-Burlingham reports that such disasters as war have comparatively little significance for children so long as they only threaten their lives or material comforts, but become enormously important the moment they break up family life and uproot the first emotional attachments of the child within the family group.

In another study of emotional reaction of children to disaster, Bloch, Silber and Perry (1) clearly established a post-disaster increase in dependency needs characterized by symptoms of regressive behavior. They observed that a greater need for belonging and a reaching out for others were typical disaster responses in children, but that such manifestations would tend to be arrested or at least alleviated by the presence of a parent during disaster situations.

These principles found a practical application during the Arab-Israeli war of 1948 when the Israelis adopted the practice of requiring one parent to remain with the children if the other were assigned to a hazardous mission, so as to minimize the likelihood of children becoming doubly orphaned. The authors are convinced that a modification of the "women and children first" rule by insistance that a parent accompany the child, even if the only parent available be the father, would represent a sound application of modern psychiatric insights.

OFFICIAL IDENTIFICATION LISTS

The lack of an official list of survivors contributed to the delay in the reunion of families separated during the disaster. As far as we could ascertain, such a list was not initiated with the rescued during their stay aboard the *Ile de France;* this and similar delays on other vessels and at collection centers may account for the fact that several days passed, in some instances, before families were reunited.

Comment.—Prompt establishment and publication of such identification lists is an important leadership device in combatting panic and maintaining morale. This device serves a twofold purpose. First, it is reassuring to the bewildered survivor to be recognized as an individual; the mere recording of his name, address and next of kin helps to re-establish, in his mind, the intactness of his shattered ego. The instances of amnesia during the initial psychic shock phase, to which we referred above, tend to support this concept. Secondly, to expedite the reconstitution of broken family units is a matter of equal psychiatric importance for the isolated individual. A considerable number of passengers on the *Andrea Doria* were immigrants coming to the United States, for whom the catastrophe represented a complete loss of identity in both the physical and the psychological sense. For members of this group, the loss of their passports constituted the end of their individuality; in contrast to the tourists, for whom the loss of passports was merely a transitory predicament which failed to damage their identity: they could always return to their background, their money and their roots. But for the immigrant the passport symbolized not only his individual identity, but also his sense of belonging, and it is not surprising that to save it was of greater importance to him than the saving of physical property. Those who could save their passports managed to maintain their pride, even if they had lost all their material belongings; those who failed to save them became "stateless persons," temporarily at any rate, whose whole sense of belonging went down with the *Andrea Doria.* The publication of an identification list of survivors would have brought a great measure of relief to these people for whom the loss of a passport also meant a discontinuation of their body image, a psychic loss which would have been relieved by being included on such a list.

REACTIONS AMONG THE ILE DE FRANCE PASSENGERS

Many lay persons, in subsequent discussions of the *Andrea Doria* disaster, have remarked: "How depressing it must have been! It must have cast a pall over the rest of your trip." This attitude, which implies a deep identification with the victims, can be

summarily dismissed. To our knowledge, there were only a few passengers who became so depressed that they decided to interrupt their trip to Europe and return home when the *Ile de France* docked at New York. It was not difficult to ascertain that these people had been depressed prior to their departure and that their depression was merely reactivated by the events at sea. In general the impact of the catastrophe did not have as disruptive an influence as one might think.

Comment.—It must be remembered that most of the passengers on the *Ile de France* were asleep at the time of the collison. They were stupefied when, upon awakening, they found out what had taken place, and manifested rather a feeling of shame and of having been cheated of the experience. One of the authors vividly recalls his feelings of anger at not having been awakened and of deep disappointment when his services were not needed. The passengers somehow reminded one of soldiers during a war who have remained behind the front lines and never got to see a real battle. This usually generates a sense of guilt, which no doubt was also present in all the passengers who showed a readiness to help as much as they could and even displayed acts of generosity.

All this points to a confirmation of the principle that guilt can be a positive force of social good when given proper channels of expression in terms of morality and social approval; in the process, personal neurotic anxiety and depression may be relieved.

PERCEPTUAL DISTORTION

Several passengers on the *Ile de France* were awakened by the sound of lifeboats being lowered to pick up the *Andrea Doria* survivors and went back to sleep with the thought, "this is only a drill and is of no concern to me." One man expressed this aloud to his wife and got up, reluctantly, only at her insistence that drills do not take place at 2 a.m. A particularly fascinating experience was reported by a man who heard voices outside his cabin. He got up and saw several lifeboats in the water. The people in them wore the conspicuous orange-red life preservers, and in the brilliant spotlights of the ship these colored life preservers had, to his mind, a festive quality. The sounds outside, which were actually expressions of misery, sounded to him like laughter and gaiety. It seemed, to quote him, "like a carnival in Venice." He went back to bed muttering to himself that this was carrying the Frenchman's love of fun a little too far and that one should not cavort so noisily in the middle of the night. He was just falling asleep when the true significance of what he had seen hit him, and he leaped from his bed and got dressed. Several others reported hearing sounds outside the portholes which they interpreted as sounds of festivities and merriment.

Comment.—In each of these cases we find perceptual distortions which parallel those taking place in sleep. Stimuli received during sleep are transformed into dreams that encourage the continuance of sleep. In our examples the subjects were already awake, but interpreted their sensory impressions in such a way as to justify a return to sleep; *i.e.*, in a way designed to relieve anxiety which would disturb sleep. Instances of sensory distortions under similar disaster circumstances are described in Lord's(11) book on the *Titanic:*

> Individual voices were lost in a steady, overwhelming clamor. To Fireman George Kemish, tugging at his oar in Boat 9, it sounded like a hundred thousand fans at a British football cup final. To Jack Thayer, lying on the keel of Boat B, it seemed like the high-pitched hum of locusts on a midsummer night in the woods back home in Pennsylvania.

PROPERTY

During the evacuation of the *Andrea Doria,* most passengers were forced to abandon their belongings. Such exigencies throw an illuminating light upon feelings toward property in disasters. What do people try to save under these circumstances? What do they choose to take with them in the process of trying to save their lives?

The main concern of the immigrant group was focused on the effort to save their passports, disregarding articles of material value. For members of this group, as we have noted, a saved passport meant the continuation of body image, the tangible affirmation of survival, the maintenance of their sense of belonging and pride. But of course, too,

the saving of valuables appeared to be secondary. In some instances, women already enjoying the safety of a lifeboat would drop their jewelry into the ocean.

Comment.—One might speculate about the sacrificial symbolism of such acts which imply the offering of sacrifice as an expression of gratitude for the sparing of life. The fact that a lady who had saved her mink stole became the object of ridicule would seem clearly related to such feelings. While behavior observed during the sinking of the *Titanic,* like our notes on the *Andrea Doria* catastrophe, revealed a rich variety of attitudes toward property, the former would equally tend to confirm the existence of a need to offer material sacrifice in exchange for life. The following examples are taken from records of the *Titanic* affair. One person took with her a musical toy pig, another a bible, another a revolver and a compass, another only books, another four oranges. Two outstanding instances were noted in Lord's book, both expressing a curious disregard for valuable belongings: one was the case of Mrs. Dickinson Bishop who, having left behind 11,000 dollars' worth of jewelry, sent her husband back to the cabin for her muff, the other, the famous decision of Major Arthur Peuchen to abandon 300,000 dollars in stocks and bonds and to take merely a good-luck pin and three oranges. Although there were others, like Mrs. Adolf Dyker, whose main concern was the saving of their jewelry, the outstanding feature of property rescue was the secondary importance attached to articles of monetary value. The authors found a striking parallel, in these reports, to incidents observed in the more recent disaster.

CLOTHING

In the course of leaving the *Andrea Doria,* most passengers had to shed their shoes and partially also their clothes. Thus they came aboard the *Ile de France* shoeless and, many of them, scantily clad. Crew and passengers of the rescue ship were generous in their contribution of clothing articles; yet it caught our attention that some of the survivors, mainly among the younger people, were not too eager to accept the garments thus offered to them. But their attitude was in sharp contrast with that of the majority who felt deeply ashamed at being unclad and, when given clothes, expressed their feelings of becoming dignified human beings again.

Comment.—These people looked upon clothing—as Flügel(3) observed in his brilliant exploration into the psychology of clothes—as protection against the unfriendliness, the enmity of the world as a whole, and as reassurance against the absence of love and security. Being in unfriendly surroundings—and to these people, who had to abandon the familiarity of their own ship, the chilly decks of the *Ile de France* must have appeared unfriendly—their natural tendency was to button up, to wrap garments around their bodies. They felt agreeably strengthened and supported by clothes in such circumstances.

It was interesting, therefore, to speculate on the motivations of those younger people who hesitated to accept the offers of clothing. One might ascribe to them, on the one hand, a feeling of bravado and assumed poses of heroism, possibly tending to exploit their situation in the hope of obtaining greater, more substantial rewards upon their arrival in New Jork, in the manner of a child who rejects a small toy while waiting for a bigger one. On the other hand, and perhaps more significantly, one might conjecture that they were also gratifying exhibitionistic fantasies; *i.e.,* that they derived a narcissistic pleasure from the display of their bodies and that their lack of eagerness to accept clothes indicated a hesitation to sublimate it.

The behavior of both groups with regard to clothes, as well as the contrast between the two attitudes, provides a striking dramatization of Flügel's findings that articles of clothing are essentially in the nature of a compromise between conflicting elements for the establishment of harmony, in the same way as neurotic symptoms represent a compromise between conflicting and largely unconscious impulses.

Summary and Conclusions

We have presented observations concerning the phases of initial psychic shock and of recovery; prejudicies and paranoid attitudes;

the problems of communications, of leadership and of children in disasters; the role of official identification lists; reactions among the *Ile de France* passengers; instances of perceptual distortion experienced by the latter; and various attitudes of the survivors toward personal property and toward clothing.

It is our hope that these observations will be of interest and possible value to those concerned with the psychological problems of civil disasters. The sinking of the *Titanic* in 1912 prompted major reforms and improvements in the physical aspects of safe navigation. Our psychological exploration of the *Andrea Doria* disaster, unsystematic though it be, points to avenues of further study into the following areas:

(a) Our notes on the role of prejudice in the development and resolution of crisis might merit the attention of the World Federation for Mental Health in its program for the prevention of social and individual emotional disorder through the systematic search for tension-reducing techniques. Our observations also emphasize the importance of paranoid reactions which are apt to arise in crises and to intensify conditions of chaos.

(b) The *Andrea Doria* experience points up the fallacy that all disaster training must be based on the expectation of nuclear warfare. Men of leadership caliber who shy away from preparations for atomic attack might participate more wholeheatedly in programs which emphasize training for such peacetime disasters as may befall anyone.

(c) The introduction of leadership devices that are based on established psychological needs. In our discussion of the "women and children first" principle we pointed out the desirability of having at least one parent accompany the child. The need for such practice has been amply demonstrated during previous crises in recent history. The importance of a speedy method of collecting and publishing survivor identification lists in disasters has also been established as a major device designed to aid survivors in maintaining their identify and to alleviate the traumatic content of their experiences.

The authors do not attempt to draw any general conclusions on human nature from the *Andrea Doria catastrophe*. But they do believe that the introduction of modern psychiatric principles in these areas will effect progress in important aspects of human welfare.

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GROUP PSYCHOTHERAPY: INDIVIDUAL AND CULTURAL DYNAMICS IN A GROUP PROCESS

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Group psychotherapy depends on the dynamics of three processes. These processes are interwoven. Simultaneously, they involve the group, the individual and his cultural background. To date, there has been relatively little attention paid to this interweaving of three basic elements, their relative weight or effects, and the influence of one upon another during treatment. Since group techniques are used constantly and increasingly in hospitals and in private practice, a systematic approach to the total process is required.

This account discusses relevant aspects of the total process in which each term, the group, the initiator of therapy (the psychiatrist), treated individuals, and a variety of cultural backgrounds all play a role. For purposes of analysis, these relevant aspects of the listing just given must be determined. We therefore discuss them in the order of (a) the group, (b) the individuals and (c) cultural backgrounds represented by the physician and the treated individuals. In so doing, we shall deal with affective constants and variables associated with the terms listed as if they represented a continuum ranging from more optimal emotional conditions to those involving greater disturbance. We therefore begin with the group.

While most *group* psychotherapy involves Freudian presuppositions, Freudian notions of a necessary procedure are often lost in the complexity of the group process. We shall regard Freud's voluminous writings on psychotherapeutic procedures as being in "the public domain" and shall purposely avoid a list of specific references. However, such various works as Freud's *Interpretation of Dreams* or his *Constructions in Analysis* readily come to mind as instances of the assertion that therapeutic interpretations are really reconstructions of the past. In *Constructions in Analysis,* for example, it is stated clearly that only further steps in the analytic procedure enable the therapist to decide upon "correctness or uselessness" of such constructions. This operational procedure in psychoanalysis, which Freud stated was conjectural, awaiting "examination, confirmation, or rejection" really accords well with the operational and exploratory character of most group sessions. However, Freud paid little attention to concomitant group influences in treatment sessions. Even in the *Psychopathology of Everyday Life,* the impression one has is that two-person situations, rarely with a modest audience of onlookers, predominated. Many of these instances involved the individual and his errors of omission or commission, acting alone.

What, then, does the group—even a somewhat amorphous and experimental one—add to this picture? The last decade has seen great development of research interest in the organization and functioning of small groups. Hare, Borgatta and Bales have assembled much of this literature(5). From mountains of research, the flowers of information are rare, but they have definite uses, when catalogued, for group psychotherapy. In 1940, the anthropologist, Chapple, discovered all persons have characteristic or normative rates of communication, described as interaction levels. Experimentally, the rates showed modification by interaction constants of others in the same situation. For example, as politeness or shyness in strangers wore off as a function of time spent together, each approached their already noted, or normative, levels(3).

Psychiatrists add to this a crucial observation, namely that a mental illness may drastically modify such normative interaction levels of personal communication still further. Again to cite theoretical statements of this idea, already in the public domain, one could note that this particular observation formed a large part of Sullivan's *Interpersonal Theory of Psychiatry* or of Fromm-Reichman's *Principles of Intensive Psy-*

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chotherapy. Stanton and Schwartz's *The Mental Hospital* is a third well-known work replete with such instances. What is arresting about these three well-known works, taken together, is that they stress almost with increasing emphasis that the interpersonal theory of illness, or the interpretation of schizophrenia given by Fromm-Reichman, or the responses of patients to milieu reported by Stanton and Schwartz record the levels of personal communication as functions of both longstanding illness processes and more contemporaneous experiences. Although the parallel literature from group psychotherapy is too extensive and scattered to adduce here, group psychotherapists know that a particular "emotional climate" or discussion-sequence may modify individual and group interaction rates noticeably.

In the field of small group research, rate is the *quantity* or *amount* of human, symbolic interaction. We already know this quantity, as a total, is increased in the group process. However, besides the quantity or amount, there is the further question of the quality or depth of expression. In the three volumes mentioned, it is stated both theoretically and concretely that *quality* or *depth* of expressive communications may range from superficial to highly expressive symbolizations of subjective states. Small group research has often not troubled to make such distinctions as to content. Yet, in psychiatry, the quality or depth of the content of communications has been of overwhelming importance as soon as psychodynamics became a central focus of therapeutic procedures.

However, while amount or depth of communications has each been noted in psychotherapy, a third element seems to be involved if we are to deal with affective constants and variables associated with the terms we have listed. Both small group research, and considerations of the depth of expression, may easily overlook this third aspect. While the Freudian system suggests expressions in depth may be cathartic, increasing emphasis on ego structure has warned against an unbridled flooding of impulses. Much of this discussion has been couched in terms of transference and countertransference as if larger group relationships hardly existed. The author, therefore, introduces as the third term the *emotional valence,* or *combining power* of an affective state, and of its verbal and non-verbal symbolizations. Here one thinks not simply of depth of emotion, but of characteristic style of affect. Polar examples might be hostile or cooperative utterances. But in reality, human behavior is so modified by symbolic constructs resident in cultures and in subcultures that no individual exposed to cultural backgrounds at all fails to incorporate emotional valences towards persons, objects and ideas. These are best called human *and* cultural values. Obviously, they relate to the social role expectancies and functioning of persons in a static or in a changing cultural scene. Equally, the social roles and statuses are themselves dynamic and multiple since they apply throughout the life-cycle.

To illustrate, in a scale, one who has participated in group sessions can discern the illness polarity in low rates of interaction as to quantity, depth or emotional valence. Actually, these aspects interblend or interpenetrate, affecting one another. For example, low rates of interaction may be mixed, or modified by, hostile non-verbal communications. As is known from studies of schizophrenics, the rate of interaction should not be confused with lack of reaction. Blocking, rigidity and withdrawal may all be defenses changing interaction rate. Similarly, on the levels of depth of expression, these impediments may be patterned or sharpened as habitual response to be denial, circumstantiality and only superficial contact with the tests and identifications of reality. Then, indeed, one is contrasting this lack of realistic spontaneity with forms of participation that are emphatically sincere and honest. Here we have been thinking of quantity and depth, respectively, in interaction processes. For the third term, emotional valence or style, the illness polarity may disclose, for example, generally antagonistic, resentful or revengeful modes of interpersonal expression as typical. Quantity, depth and style (or emotional valence) are, taken together, indices of the dynamics of an illness; and without this methodological organization or specific type of recognition, they have already

been utilized in successful individual or group psychotherapy.

In respect to the interrelations of these elements, we have already noted that quantity *increases,* in affective stimulus or response, mark both the normative and the therapy group. Why is this? First of all, the affective stimuli are increased by the presence of several persons, but in addition, Borgatta and Bales learned that an individual typically tends towards his maximum rate of participation, modified for each by respect for the participation of others(2). In such striving behavior, there may be attempts at mastery, coping or reward-seeking since Keller found experimentally that those who initiate more discussion usually have more remarks directed to themselves(6). One learned also by experiment that groups arranged in circular (democratic) and intimate face-to-face patterns, without intermediate dominating figures, had both more interaction and superior morale as a result, Bales adding to this that the optimal size is the 5-person group. Miller has noted in the same context of small group research as Bales(5) that there are limits to our natural capacity for processing information, and that 5 to 7 units mark limits for visual and tonal stimuli, beyond which, at 8 or more, errors are common. (Compare 1 and 8.) Like the "span of immediate memory" or digit span tests, 7 appears to be a common limit.

In anthropology, both Murdock(9) and Lowie(7) have noted the universality of the "nuclear family" of parents and children, with kinship systems beyond this unit ignoring, restricting or creating and expanding such natural bonds through terminological notations. The nuclear group terms, however used—and the systems are several in world history—seem to run parallel to what is learned as to optimal size of human small groups though the actual individuals noted may far exceed the denotative kinship calculus used to categorize them. These data on human social organizations corroborate Bales' experimental data on the "best" size for maximizing interaction, except that here social organizational realities require humans to apply denotative kinship terminologies to often vast groupings, like clan relatives, which exceed common intellectual capacities.

In group psychotherapy, one is dealing neither with normative family structures nor kinship variations. Even the abstractions of normative group processes, their quantitative and interaction findings must be taken together with considerations of the depth and style of individual communications as affected by group process or milieu. Thus, depth and emotional valences become somewhat more germane than the quantitative matters just reviewed. As with kinship systems in culture, though there are quantitative parameters indicated by the human limits for processing information, the information itself must be processed in patterns that are both personally and socially meaningful to the individual, or they become lost items in the business of living. In the serious work of role-playing, we can only assume or interpret roles that have some symbolic meaning and significance. As participants in any settings, group-oriented or individually expressive, role-conflicts are bound to impede action, emotion or cognition where they proceed from a splitting of values, meanings and goals. Both neurotic conflicts in which the struggle for a meaningful integration is still going on, and psychotic splits in which roles are curiously divorced from realities express the resultant states, the balances and imbalances, achieved in the service of role conflicts.

Group psychotherapy, according to Dreikurs, developed "almost incidentally" within psychiatry as a form of treatment devised "primarily to save time for the overburdened practitioner(4)." This is true, but almost equally there was a sense of generic similarity in problems of role functioning of classes of patients. Pratt, designated by some as "the father of group psychotherapy," discerned near the turn of the century a common problem in lower class tubercular patients connected with the isolation and sense of secrecy and shame connected with this disease, and its recognition and management. Accordingly, he used the group technique to create hope and give patients instruction about the management of tuberculosis. In the mental hospital, both Lazell and Marsh suggested total push methods in application to

schizophrenia, creating awareness that psychotics received benefit or "revival" from social interests and responsibilities. Adler applied the method in a more preventive sense to teacher and parent groups, again social role categories. (Compare items under 14, Pratt to Adler.) There is no doubt that current group psychotherapy in mixed groups has moved from these basic considerations, but it is as concerned today with role-conflicts exhibited within individuals and in groups as it ever was.

Dreikurs, in the article alluded to above (4), claims the "First Psychiatric Revolution" occurred with the introduction of humane treatment in mental institutions. The "Second, or Psychoanalytic Revolution" may be designated in his fashion as stressing early development and family experience (our emphases, M.K.O) in an era of "accentuated individualism" during which the psychiatrist "moved into private practice" (Dreikurs). Whichever aspect one stresses, the role of the physician, or the tendency to extend the interpretation of human relationships in the light of the patient's experience in the family, the latter were, as Dreikurs has noted, explored chiefly through individual psychotherapy following the recognition of the dignity of the person. It is easy to underestimate the importance of the psychological development of the individual in a family setting. In terms of our own methodological organization, we may note that the current emphases on small group dynamics—the typical sociometric and quantitative approaches to interaction—equally underestimate roots of family settings in typical subcultures of our times. While the quantitative approach to interaction may recognize human limits and potentialities for communication, such discussions of human optimum capacities are abstract unless both family and cultural role conflicts are explored. It is no accident that while group psychotherapy left the door open for Freudian and Neo-Freudian experiments in the quality or depth of expressive communications, it said less about emotional valences or basic styles of affective role conflicts.

However, besides the individual and the group, and the concerns respectively for depth of affect and quantity of interaction, there are the affective patterns or styles of emotional expression which are chiefly an outcome of cultural role conflicts. Anthropology has long recognized these, without systematization in any given theory of personality, under the rubric of *acculturation*. The author, in working with Linton, and in focussing upon acculturation differentials where two cultural groups were involved in cultural change and interchange, noted in 1940 that larger cultural conflicts disrupting integration within a group resulted in poorer health, mental and physical, for the more rapidly changing culture representatives (10). This position was expanded in the framework of personality theory, in 1956, to include the nature of the culture, that is, its roles and role-conflicts in the setting of the pace and type of acculturation which existed. (Compare items, 10.) Just as *depth* of affect, a function of the quality of defenses, may govern the *quantity* of interactions or communications, so the experiences of early learning, affecting this depth, may influence the individual rates of response, in one direction or another. This formula states, in effect, that family experiences are crucial in determining what Chapple designated as normative interaction levels. Genuine group experiences, in 5-8-person groups, are apparently maturing or socializing in this sense since they provide the setting for normative levels to emerge while providing, even more than in individual therapy, the various parental, sibling and child surrogate figures which so often appear in such milieus. Consequently, when properly organized, they raise interaction rates on the average. It is presumed, when such symbolic substitutions for family figures are made, or when transference and countertransference phenomena occur with greater rapidity, that an advantage is gained by such symbolic introductions of family figures and amnestic experiences. No doubt, this is not only because quantitative rates are increased, but because *depth* and emotional *valence or style* are more involved. In the author's terminology, one is introducing the *wider context* and its *bind-*

ing conditions into the stage of affective recognition by inducing the patterned family and social influences(11).

These patterned family and social influences, to the extent they are acquired or transmitted by symbols and express roles, are by definition cultural. Since value orientations and motivational structures meet at this point, depth and style likewise converge. In dealing with symbolic, culturally influenced roles, psychiatry will do well to recognize that such behavior depends upon patterns larger than specific family contexts, but are ingrained and reinterpreted chiefly through family settings. The psychic economy requires some perceptual, affective and cognitive classification and denotation of experiences, much as kinship system, language structure, or ethical and valuational methods in a culture provide the simplifications that allow us to read the social and cultural map. Thus the individual products of any social and cultural influences are not coterminous with the adjustments found in society and culture generally, and we may speak of the uniqueness of an individual or the variance within an illness process. The limits to individuality or even "normalcy" for that matter are set by common experiences in family and extra-familial settings. Because social roles are limited by life-course associations, speech patterns, or styles of emotional expression, they are undergirded by value systems, motivations and culturally determined stresses. In addition to depth of affect, we can ignore stlye of emotional expression and role-conflicts only at our peril in psychotherapy. Both influence quantity and depth of emotional communications. In short, the wider context of emotional valence and culturally determined roles influences the depth and quantity aspects of psychopathology.

Because of space limitations, only two examples may be given. A Puerto Rican psychiatrist, Torres-Aguiar, reports his observation of relatively high prevalence of catatonic outbursts of a hostile and aggressive sort in schizophrenics of lower class background. Schizophrenics with paranoid reaction, centered in confused sexual identity, are likewise typical and the paranoid elements are freely expressed. In the neurotic categories, classical hysterical conversions, attacks of fainting more commonly for women, and freely expressed hypochondriachal complaints seem more marked in urban Puerto Ricans of the island than in most modern cultures. Today, such traits are seldom emphasized in reports from other urban scenes. Our observations on Puerto Ricans on the mainland, first generation, run strictly parallel. In fact, all norms of emotional expression and display of affect are more noted among these people. There is, as a cultural pattern, little inculcation of guarded affect, an emphasis upon *soma* and interest in sexual detail, great concern about health, and currently much disturbance occasioned by a shifting, particularly in urban scenes, of the social and economic role positions of the two sexes. Dr. Torres'(15) and our own observations run parallel on finer details than can be given here.

Similarly, the author studied South Italian and Irish schizophrenics of 3 generations. The Italian migrants and their descendants appeared to have a larger proportion of patients having catatonic outbursts of the hostile and destructive sort, while the classical reactions of paranoid type were found in the Irish patients, varying considerably from Puerto Ricans in guardedness, for one feature. All had the "official diagnosis" of schizophrenia, but the differences were vast indeed. In discussions with such patients singly, or even in group situations on the ward, it was helpful to anticipate such variations in emotional patterns and discuss them with the patient on neutral grounds of cultural affiliation. Viewing quantity, depth and style of emotional communications as an integrated balance of personality, one avoids a moralizing, condemnatory or judgmental tone in favor of satisfying discussions of social and cultural roles. The neutral grounds of cultural interest and affiliation provide the wider context of family background and individual experience. Elsewhere, we have called this method of inducing the wider context as the initial step, "cultural push therapy"(10).

In our experience, cultural reference al-

lows for a more delicate processing and ventilation of experiences in therapy. The neutral grounds of cultural interest provide more motivation for achieving perspective on social role positions. Any relationships, going in a series from man to fellow-man (social relations), man to family, and finally degrees of self-awareness, figure in cultural discussions. Even man-to-nature relationships are relevant. Ordinary guide lines of cultural experience give perspective and provide the same life-course phenomena and family roles that are the typical interest of patient and therapist alike. The therapist's acceptance of a person's culture is therefore the first step in his understanding of the family and the individual. For the patient, similarly, self-esteem and self-awareness may well depend on the rapport set up in such interchanges of cultural meanings and implications. In the studies of schizophrenics, Italian and Irish, alluded to above(12, 13), the entire structure of the illness and of current defensive balances depended upon the emotional valences built up in a subcultural setting and in a family over time. Quantity and depth of emotional communications varied notoriously with the course of illness, but style of emotional expression, far more crucial, varied with the culture and the role conflicts introduced between generations.

In group psychotherapy, there is opportunity *par excellence* to build up cultural awareness and respected identities. These, in turn, represent a gain, or the occasion, for developing individual perspective on self-images, and empathy for the products of others' lives. For the therapist, who must guide the total process, an awareness of the differing family structures and role conflicts of various cultures and subcultures will provide a key to emotional valences of persons coming from various backgrounds. Apart from quantity of human interaction, the varying depths and styles of emotional expression point directly to typical roles, which need better understanding and depiction, since these roles, in turn, represent the sorting into modes of action of values, aspirations, motivations and typical stresses. The firm texture underlying conduct is far from biological need alone. Until such keys to behavior, normative and aberrant, are used, we cannot enter into a world of meanings which are otherwise only the sealed-in aberrations of troubled minds.

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NORMAL DEVIATIONS FROM REALITY

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"Reality" is a very ambiguous term, one that immediately raises a host of issues. Gregory Bateson has contributed to clarification here by outlining 5 definitions that can be found in psychiatric thinking(1). In one sense the word denotes the external world as perceived by the senses. This definition contrasts reality to fantasy and projection, but the term is often used in a contrary manner to denote the very subjectivity that is rejected by the first definition, reality referring to the individual's private world. A third definition involves awareness of one's idiosyncratic views and an ability to transcend these individual peculiarities in the interest of greater accuracy and effectiveness. Fourthly, the word appears in the phrase "the reality principle" which is commonly contrasted with the "pleasure principle," thereby suggesting that reality is unpleasant. Finally, reality is often contrasted with phenomena of magic. In this sense it is based upon the conceptions of science.

The relevance of these 5 definitions to the means and ends of psychotherapy is a complex subject that lies outside the competence of the sociologist. Here our purpose is to show that certain degrees of unreality, far from being a handicap to normal men and women, actually contribute to the maintenance of their morale. We shall maintain that the biases favorable to morale are not occasional deviations from normal thought and action but are in fact indigenous to culture and social living.

Now it is evident at once that a particular definition of reality is implicit in this statement of purpose. Let us be more explicit. In the discussion that follows *a sense of reality refers to conceptions of the social environment and of oneself which satisfy the highest standards of objective accuracy.* It may be noted that this definition touches upon the first, third and fifth definitions developed by Bateson. From our point of view realism stands in contrast to the conventional biases and illusions of man's social life.

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Immediately the question will be asked, "And who shall decide what is objectively accurate?" Are we not hopelessly caught in the toils of biases both subjective and collective? Actually the dilemma is less formidable than might seem to be the case at first glance. Once the fundamental value of special competence is granted, it becomes relatively easy to establish adequate standards in the complex task of determining reality. An assessment of sociological data and of opinions about these data can be undertaken by scientific experts whose knowledge and judgment tend to approach objectivity. Just as the psychiatrist possesses special competence in judging degrees of reality or unreality in the patient's mind, so the social scientist is equipped to determine not only the nature and extent of distortions in collective thought but also their social causes and effects.

The following examples represent common types of deviation from reality that can be found in American society today. Of course, it is not suggested that *everyone* exhibits these tendencies, but merely that the types of thinking described here are sufficiently common to warrant the attention of the sociologist

NATIONAL CULTURE

The concept "ethnocentrism" serves to emphasize the amount of unreality existing in all cultures. Each folk or nation tends to consider its ways as best and measures other cultures by its own yardstick. The achievements of the past, the rightness of current practices, the greatness of their destiny—such grandiose views are widely supported by the members of a given society. Informal and formal teaching by adults give sanction to the *mores* and this process of indoctrination is reinforced by habits formed in the daily round of activities. In a sense it may be said that, when one member lies—in an approved direction—the rest will swear to it. Thus, each culture generates and preserves a set of biases considered appropriate to its

ongoing life. The "strange," "irrational" or "immoral" ways of other people are viewed with amusement or alarm by the vast majority who, by these reactions, give emotional sanction to accepted patterns of living. Even in the most liberal cultures open-mindedness in regard to basic *mores* is sometimes tolerated but never actively encouraged. Australian aborigines, Japanese, Americans, and all other peoples are expected to follow the fundamental beliefs and values of their respective cultures.

Except during periods of upheaval and rapid change, deviations from cultural orthodoxy are not frequent enough to constitute a serious threat to group integrity and morale. The majority have little desire to run athwart the conventions but grow up to believe what they are supposed to believe. Some sacrifice of reality seems a small price to pay for social approval, especially since most people do not understand obscure issues of reality and unreality and, consequently, are wholly unaware of any "sacrifice.' It is true that the more democratic nations do permit critical public discussion but even in these countries the distorting influence of patriotism is quite evident.

The following illustrations bear upon this point. We in the United States want to believe in the essential soundness of our family system, business institutions, schools, system of government, and our other institutions. Out of this patriotic faith the citizen builds loyalty and morale for peace-time pursuits as well as for times of war. It has come as a shock to many to learn that the "backward" people of Asia believe that they are just as important as the United States of America. In our naive way we tend to think that everyone the world over accepts the goodness and greatness of our country as a permanent feature of the universe. We firmly believe that our actions are ever rooted in high moral principles and feel hurt or irritated when our policies are examined by other countries for dollar diplomacy. Moreover, when certain powerful leaders of Asia prefer to avoid clear-cut alignment with our side in the cold war, we tend to react with adverse criticism, if not open denunciation. In such ways patriotism may preclude an adequate appreciation of the problems of Far-Eastern countries.

On the domestic front one of the most noteworthy examples of unreality is the refusal of the general public to face the grim possibilities of war. A naive observer, uninitiated in the processes of illusion-building, might surmise that the development of atom and hydrogen bombs, not to mention bacteriological warfare, would lead our nation to give this problem top priority. But what has been the situation during the post-war years? Civil defense gets small public attention and small public subsidy. Urban re-development proceeds largely on the basis of pre-atomic thinking, increasing congestion rather than encouraging wider dispersal of the population. And what of the private efforts of individual families? Conscientious parents, striving to establish a good home for their children, will look amazed when you ask whether they have made plans for protecting their families in the event that a major war should break out. It is just too horrible to think about.

This is conventionalized escapism, to be sure, but it is the present thesis that such deviations from reality are important to adjustment. What can the individual citizen do, in the face of technological progress and institutional lag, except to indulge in a certain amount of "ostrichism?" Somehow or other he must carry on his daily affairs *as if* such threats did not exist. Perhaps physicists and engineers are perfecting a bomb five hundred times more destructive than those dropped on Japan in 1945 but right now the baby must be fed, the boss is calling for that report, or a party is being planned. The maintenance of morale seems to require that we avert our gaze from the grim possibilities of destruction, and hope for the best.

It is clear that the optimistic spirit has pragmatic value for individuals and groups, signifying faith in purpose and expectations for success. Yet optimism operates as a defense mechanism, the optimist seeing only what he wants to see. Aspects of the total situation that do not fit his orientation are ignored or, if recognized dimly, pushed aside before they emerge into full consciousness. Those holding important administrative positions may expect subordinates to dispel their

doubts. Others seek reassurances from family and friends. In numberless ways we support each other in rose-colored views of reality and express disapproval of those who try to puncture the illusions by which we live.

The origins of American optimism must be sought in history. This frame of mind developed readily in a new country, rich in natural resources, expanding industrially and agriculturally, growing in size and power as more and more young, ambitious immigrants came from Europe. An optimistic outlook was an essential ingredient of the enterprising spirit of the 19th century and many believe that it is just as essential today.

SPECIALIZATION

Some degree of distortion appears to be inherent in the outlook of the specialist; indeed, in folk humor, specialists of all kinds are belittled because of their biases and lack of common sense. Now the sociologist realizes that various institutions (economic, political, educational, religious, recreational, etc.) in modern society are characterized by an increasing proliferation of structure and function, leading to individual careers which are more and more specialized. Yet, in the midst of this growing division of labor, the individual tries to preserve a sense of his significance and worth. In some occupations, such as routine tasks of a large factory, it is difficult to do this; but even in careers of higher status there is a constant struggle to preserve a sense of personal significance. In this effort a full and steady sense of reality may be a distinct handicap.

The academic profession may be used as an illustration. As subject-matter in various fields of knowledge has broken down into more specialties, scholars tend to concentrate upon knowing more and more about less and less. Under these circumstances it is easy, and perhaps necessary, to over-value the particular segments of knowledge where one's own proficiency lies. Such over-valuation seems integral to professional adjustment in the academic world as it exists. He who plays the game according to the rules is likely to gain promotions, offers from other institutions, an impressive list of publications, and other advantages. College presidents may deliver stirring addresses criticizing the narrow specialist, and a few professors, particularly in obscure colleges, may resist the trend but these instances have little effect upon major tendencies in the academic profession. (In a few universities the embryonic professor can now take broader graduate programs in the social sciences or humanities but it remains to be seen whether this type of curriculum will have a significant impact upon Ph. D. education.)

It is the function of college administrators to construct a broad overview of institutional purposes. Insofar as administrators fulfill this function, they do bring a more realistic perspective to bear upon major decisions, decisions compounded of many ingredients contributed by various specialities both within and without the institution. Yet it cannot be assumed that top administrators are consistent realists. The ego feelings of these leaders are likely to be deeply involved in their organization. Such persons look upon the enterprise as peculiarly theirs; its successes and failures are felt more keenly, its good name is related to personal pride, and faith in the institution is an extension of the leader's faith in himself. Thus, the typical college president wants to believe that the collegiate *status quo* is essentially sound. "Our college is doing an excellent job, the faculty is capable and contented, the students eager and appreciative," he tells himself optimistically. Like other practical men of affairs he accepts the reality principle only so far as it is practical to do so.

Higher education has been used as an illustration but the same processes are evident in other fields. Within the professions there are at least 3 conditions leading to occupational bias. 1. A long period of preparatory education, involving time, effort, and money, leads the professional person to place a high valuation upon his achieved proficiency. 2. Colleagues in the same field tend to support each other's evaluations and rationalizations. 3. Professional organizations also contribute to morale by holding conferences and performing various rituals designed to give further sanction to group purposes. If, out of this multilateral process of indoctrination, the individual begins to magnify the importance of his chosen career, it should occasion little surprise.

SOCIAL CLASS

A common illusion is that there are no social classes in the United States. Many like to think that one person is just as good as another in this democracy where "all men are created equal." Now it is true that social stratification in this country does not consist of historically fixed categories sharply separated from one another by insurmountable barriers; instead, we have an "open class" system. Nevertheless the factor of status is very important in social relations. Groups on a vertical scale show relative differences in manners, morals, material comforts, occupations, residences, and civic participation from those of a higher or lower status. For this reason we may properly speak of class sub-cultures.

People of various social levels tend to develop and defend an outlook on life that is functionally appropriate to their particular position. Some in the highest strata hold to the complacent opinion that the cream of society inevitably rises to the top, ignoring completely such influences as family background and inherited wealth. That broad segment of society known as the middle class commonly considers itself to be the salt of the earth. These people assume that all "sensible" folks think as they do about politics, careers, family life or education. The lowest strata also have their special ideological slants. The rich and powerful are "lucky," the poor "unlucky." Some will even assert that the higher classes operate on a lower moral plane while they are "poor but honest." To be sure, such face-saving rationalizations may contain elements of validity—but elements of unreality too.

Since the class-bound person seldom carries on extensive communication with those of a higher or lower status and since most of his associates are also class-bound, he finds it easy to retain these parochial views. In this way certain distortions are supported by the various classes—with favorable effects upon morale.

MINORITIES

Racial and national minorities may also show a reluctance to face reality. An ambitious Negro may insist upon believing that "there is plenty of room at the top," minimizing the handicap of prejudice. And why not? Assuredly it is not practical for him to dwell upon such handicaps. Similarly, Jewish men and women sometimes wear blinders so that they will not see anti-semitism. Indeed, some are sharply critical of other Jews who insist upon taking notice of prejudice. Again, in the interest of morale, why look unpleasant reality squarely in the face?

LOVE AND FRIENDSHIP

Through the ages it has been said that love is blind. Today it is fashionable among family sociologists to decry romantic illusions and urge a more realistic point of view. To some extent the new realism is salutary, for it represents the substitution of informed intelligence for traditional ignorance and mysticism. Yet the dynamics of teachers and textbook writers who criticize romanticism will bear further scrutiny. Perhaps the disillusionments of middle age are involved here. Also, a puritanical value system may lead such persons to emphasize the gospel of work and, correspondingly, to distrust those pleasures that detract from the serious business of "getting ahead."

From whatever sources it arises, this "realism" fails to understand that, in heterosexual love, the reality principle is at times "more honored in the breach than in observance." The dependent person, seeking security in the love of another, may magnify the other's strength and dependability because of this inner need. Other idealizations may concern beauty or achievement or ethics. These elements of unreality are not necessarily harmful; in many instances they are distinctly advantageous to both persons.

Parental conceptions of children can be equally unrealistic. Parents often have exaggerated notions concerning the capacities and achievements of their children—as every teacher knows. Conventionally we come to expect a certain amount of illusion on the part of parents and even view it sympathetically. Of course, there will be disappointments when such conceptions depart too far from reality but, within limits, sentimental biases constitute a bond of cohesion in family life.

On a lower plane of emotional attachment the same principle is evident in friendships. We tend to be somewhat unrealistic about good friends, thinking the best of them and criticizing those who criticize them. Perhaps many of us play politics where friends are concerned: we recommend them for positions because we like them and not because they are, in the cold light of reason, the best qualified. Such biases are given open approval in a culture that stresses the value of friendliness.

At the same time friends are expected to contribute to one's own morale by praising achievements and minimizing failures. In this way favorable self-conceptions are maintained and the harsh impact of reality softened. Thus, it may be said that a person's friends are part of a pleasant conspiracy to keep him in good spirits.

SELF-CONCEPTIONS

This leads to a final word about self-attitudes and mental health. According to the definition given earlier, realistic appraisals of one's self are based upon objective assessment of a whole range of relevant factors. On the other hand, the maintenance of morale may require some degree of emphasis upon ego-gratifying factors in the total situation of the person and a minimizing of ego-deflating factors. Such selections and rejections are made continually by the healthy-minded individual. Unconsciously perhaps, he gives goals of happy, effective living priority over the demands of strict logic.

It may also be asked to what extent these morale-building biases are encouraged in the course of psychotherapy. This is a complex question with many ramifications and, in all probability, different kinds of therapists would give different answers here.

SUMMARY

The foregoing discussion is concerned with normal deviations from reality in contemporary social life and the useful purposes which these serve. The author is not in agreement with those who believe that good mental health must be based upon realistic conceptions of environment and self. It is the present theory that individuals and groups normally develop biases consistent with their standards and purposes. This tendency involves elements of unreality but it favors mental health and high morale in society.

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RELATIONSHIP BETWEEN SOCIAL ATTITUDES TOWARD AGING AND THE DELINQUENCIES OF YOUTH[1]

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INTRODUCTION

It must be stated at the outset that in effect this paper adds another imponderable to already extensive lists of factors contributing to youthful misbehavior. It is to be hoped however that it will not be classified in that group to which Edwin J. Lukas(1) refers when he states, "Each so-called 'preventive' enterprise has its own concept of causation to which it adheres with a tenacity which would evoke more admiration if the concept were more valid."

At the risk of oversimplifying a serious and complicated field of inquiry the writer is emboldened by a group of observations having a uniformity that urgently suggests they may well be facts:

1. Certain social changes predominantly in western societies have taken place during recent decades which constitute a shift in emphasis toward children's needs, resulting in the 20th century's often being referred to as "The Century of the Child"(2).

2. Concomitant with unprecedented population increases in the late mature categories there is abundant evidence of increasing dependency by the elderly upon public institutions, often associated with diminishing acceptance of family responsibilities toward the elders. A factor of elder-rejection plays a prominent role in such transfer of obligation (3).

3. Psychiatric clinicians have noted a widespread fundamental change in the clinical picture of the neurosis, with diminishing numbers of the classic neuroses but an overwhelming increase in character disturbances in which "personality" and "symptom" are practically indistinguishable(4).

4. Increased attention in Western culture during recent years has been drawn to the problem of youthful misbehavior. The Director of the F. B. I. in the United States has issued a public statement to the effect that there has been a definite increase in juvenile delinquency rate disproportionate to population growth.

5. There is fair evidence that countries and ethnic groups having a low juvenile delinquency rate are those whose cultural atmosphere reflects veneration and, or at least, acceptance of the aging and the aged. Agreement is general among sociologists and anthropologists(5) that elder-veneration, tradition-boundness, and a low rate of youthful delinquency are frequent concomitants.

The present thesis suggests that the foregoing social findings are mutually interrelated in a psycho-social equation; that a cultural factor of elder-esteem or elder-discard enters intimately into character formation in the development of personality; that the characterological attributes having to do with attitudes toward the aging are decisively linked to value systems governing moral and ethical principles and conformity; that devaluation and discard of the late mature generations are real social hazards potentially damaging to children; that the absence or distortion of a concept of social authority in which the status of the elder plays a significant role contributes importantly to a widespread looseness, waywardness, and rebelliousness of youthful behavior; and that without losing any recent social gains it is possible to influence favorably some aspects of the character formation of youth by restoring to the process of aging a connotation of authority and an implication of social reward.

THE CENTURY OF THE CHILD

Today the long overlooked needs of children have begun to receive attention. What is often forgotten, however, is the tendency of human nature to overcompensate for its defects, and to concentrate with almost fanatic enthusiasm on newly uncovered areas

[1] Presented at the First Pan-American Congress on Gerontology, Mexico City, September 18, 1956.

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of social omission. The unfortunate consequence is the impoverishment and neglect of other sectors of social endeavor.

There is abundant evidence that the qualities of youth are the preponderant social goals. Note the prevalent anxiety regarding chronological age. Witness the omnipresent emphasis on newness, sleekness, freshness, mobility and change. But, in particular, observe the everyday tragedy of people moving blindly toward the later years with their inner vision arrested deceptively upon a fond mirage of the irrecoverable past.

Mankind hardly deserves any kudos for protecting and guiding its own helpless developing neophytes. Such are the functions of inherent biological drives. But the severe test of a civilization is found in its capacity to advance beyond the simply biological, and to create systems of group living in which personal welfare and meaningful existence are every participant's birthright.

We cannot escape the present reality in which the qualities of the young side of life are upgraded.

ELDER-REJECTION

Today more people remain healthy, live longer, and reach later maturity than ever before in history. The implication of social progress is tempered by certain other parallel disturbing facts: the tremendous number of older people for whom admission is sought in mental institutions; the mushrooming nursing home enterprise; the immense proportion of elderly on public assistance rolls; the widespread absence of social and recreational provisions for older folks; the marked increase in hospital occupancy by the chronically ill; the large numbers of solitary and bewildered aged existing in substandard living conditions, passing time aimlessly awaiting the end.

Certain exigencies of urban living plus a deep psychological predisposition to regard aging as unattractive(6) have forced ever greater numbers of families to relinquish a time-honored responsibility and divest themselves of the duty to care for their older members. The closing decades of the century may mark the *Era of the Nursing Home.*

That the windup of a life in the segregated quarters of some types of institution constitutes an empty and uninspiring goal can hardly be questioned. And there is logical foundation for the conclusion that all forms of social and psychological rejection of the elders are incorporated in the self-concept of the aging and eventuate in self-rejection that heralds personality regression and disorganization.

More important still are the effect of attitudes on the character development of oncoming generations.

CHARACTER DEVELOPMENT AND DISTORTION

The formerly common classic neuroses, such as hysteria, obsessional and compulsion neurosis, were based on rigid prohibitions, suppressions and extravagant punishments. It has been said(7) that "the inconsistency of the modern neurotic personality corresponds to the inconsistency of present day education. The change in the neuroses reflects the change in morality."

Character may be defined as an individual's habitual mode of responding to demands from various sources within and without the psyche(8). It is socially determined(9). The concept of character is closely analogous to the concept of "ego" as formulated in modern psychiatry. The ego has many functions, among them being the mediation among the demands of the instincts, the pressures of conscience and certain internal automatic repetitive tendencies. Even in greater measure the ego, or character, is called upon to integrate intimately into its structure the innumerable surrounding social stresses including the mores, ethics and group attitudes.

Uncomplicated observation suggests that the perpetuation of social and cultural values, the development and support of moral and ethical judgments, the evaluation and maintenance of the substance and resources of knowledge, as well as a related assortment of intellectual activities are the inherent functions of the mature mind. Man's concept of God and his ideal representation of the elder are the authorities for systems of discipline. They serve also as the source of power and impetus to effect a realization of social plan-

ning, to create and maintain systems and modes of social welfare, and to preserve the thread of philosophical continuity that runs through the basic principles of a civilization.

The development of an ideal social conscience in a child is consequent upon the success of psychological mechanisms through which he incorporates the best personal and social symbolic images available for identification. The inspirational goals that antecedents personify and the regard of the child for his elders figure significantly. The child also will absorb the inconsistencies, the unsolved problems, the prejudices and antipathies of his educators. As Johnson(10) has pointed out the child incorporates into his character factors operating from the unconscious structures of the minds of his educators.

The maintenance of the parent and grandparent ideal as the source of wisdom, goodness and love, judiciously associated with adherence to principle is significant in the creation of an ideal social character in the child. The socially oriented structure of his character becomes weakened if there is need for rebellion against his educators. In most individuals rebellion against the elders represents a seeking after independence and personal expression. In an ideal society, regardless of individual rebellion, an aura of respect for the elder and elder authority would remain constant.

The social inconstancy of parental character, a cultural rejecting attitude toward older people and a generalized mitigation of their social authority are readily absorbed in the character formation of the developing child.

The older generations, by virtue of psychological and physiological aging processes, cannot long endure the pressures of downgrading and hostility to which they may be exposed and their diminishing resistance may progress toward social powerlessness. Such debasement of the elder in the role of and as the symbol of authority tends to diminish the meaningfulness of all social authority. Youngsters may then incorporate into their own character an attitude of regarding aging mainly as decline, decrepitude and loss of purpose. When this happens, the child may establish himself in his own eyes as a potent and autonomous authority.

YOUTHFUL MISBEHAVIOR

The decline in parental influence which parallels the decline in social authority of the older generations is currently reflected in a widespread need for an increase in police authority. That is, wherever family control is weakened, society finds it necessary to increase public and impersonal methods of behavior control.

This is not the equivalent of judicious parental control. Policing agencies are generally regarded as restrictive and punitive, not as loving guidance and training agencies. The immature character finds the presumedly punitive agencies challenges for rebellious and hostile acts. Thus, what in ideal family life would be beneficently controlled rebellion, in the social setting becomes open conflict.

Since policing services are looked upon as law enforcement instruments the distorted character's behavior may tend to avoid only that which is illegal in order to remain clear of the law. Such technical conformity permits a great latitude for actions that are socially opprobrious but not strictly illegal, and nefarious and discourteous practices of all kinds become an increasing reality. There is real social danger and potential damage to children in a social setting that demerits the elders.

Impressionable youth lacking adequate older objects for consistent identification may develop an enormously exaggerated belief in their own capacity to destroy tradition. They may disregard the mores, flout ethics, and discard historically established qualities of discipline.

Statistical tabulation(11) of juvenile offenses reveals a high incidence of acts of furtiveness and stealth or incorrigibilty and ungovernability. The minority of problems are in the area of passion or bold aggression.

An overdramatized and grandiose self-concept in the young contains the danger of contagion. The illusion of being "master" is communicable among the immature. It is a deception that may be basically responsible

for the revolutionary abolition of tradition by an entire social group and the acceptance, if even only temporarily, of a neo-devotion created on a substructure of personal aggrandizement, impulsiveness and hedonism.

ELDER VENERATION

A lack of leadership uniformity which seems intimately bound to degradation of the elders furnishes fuel for hot rebellion in younger persons whose drive toward unwise autonomy is thus reenforced. Within the family a set of attitudes is often created in the young as they observe the now hidden, now open, brutality practiced upon their grandparents by their parents. "As the child incorporates in himself the image of his parents as part of his internal organization he is absorbing among other things this very pattern of sadism aganst the senior elder. Thus is guaranteed the fact that the vicious cycle of elder rejection will remain unbroken generation after generation"(6).

Tradition-bound societies, some of which are exemplified in the ancient Chinese, Hebrew and Indian cultures, can boast of a low rate of juvenile delinquency. The common denominator in tradition-boundness is respect and veneration of the elders. A return to the "good old days" with increased irrational authority of the parents and elders, it is said, would help materially in reducing the psychological breakdown that eventuates in senility, as well as reducing the rate of youthful misbehavior. However, many social scientists and community leaders would decry any retrograde cultural change that would imply loss of any social gains enjoyed today.

Thus there is need for social planning so designed that the late mature generations are reassigned social recognition as well as the comforts and rewards to which human nature aspires.

Within the family the parents cannot relinquish their affectionate and responsible educative role without insidiously affecting the character formation of the young; and the foundation for good government and good citizenship is to be found in the proper structuring and functioning of each family.

If the hypothesis(12) is accepted, that normal maturation into the later years means increasing altruism in the older mind, then it is possible to conceive of a society in which collective social authority is irrevocably linked with elder-veneration without the necessity for sociological retrogression. It is the very nature of benevolent elder authority to employ its power not to command and dominate, but to develop leadership among oncoming generations, and to serve as adviser, consultant and coworker.

CONCLUSION

In the awesome network of social forces that relate to character and behavior distortion the hypothetical factor herein presented concerns itself with but one thread, perhaps a guyline. There seems to be a commonsense logic in the viewpoint that degradation of the elder role-model of social authority is paralleled by an increase in arrogance and wilfulness in the young.

The fact remains that aging in our culture is generally unattractive and unrewarding. A newspaper supplement recently stated the case succinctly, "the world is made for youth and youth is the time for fun." Can we expect the young to make provident and prudent psychological preparations for the advancing years, when the later period is so often seen in threatening aspect.

Desirable character formation in the young requires that the group character of a culture present a social atmosphere of dignified elderhood in which symbolic authority is implicit, an authority enriched with warmth, humanism, and charity, yet firm in its leadership, independently motivated, and oriented around group principles.

Nature has endowed youth heavily with a capacity to achieve its own rewards. Aging needs social support. If the rewards of youth are to be wisely invested to insure that lives are well spent, then the elders must be reinstated in their time-honored position as brokers in experience and consultants in living.

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FOLLOW-UP STUDY ON THORAZINE TREATED PATIENTS[1]

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Modern drug therapy has brought about a considerable increase in the number of patients returning to the community. While a great deal of knowledge has been accumulated on the effect of chlorpromazine on hospitalized patients, very little was known about whether the achieved remission of symptoms would be a lasting one, whether maintenance therapy was indicated and if so for how long a period. Last but not least, there was understandable concern about possible effects of long term chlorpromazine administration.

To study these questions a unit was set up with the purpose of keeping a limited number of patients released from mental hospitals in the New York metropolitan area under close supervision.

This report deals with 160 patients who were kept under close supervision for one full year. They came to the Manhattan After Care Clinic in response to special request: the directors of several New York state hospitals in the metropolitan area had been asked to advise patients, who had shown improvement after Thorazine treatment, to report to the clinic on the day immediately following their release from the hospital.

There were three different groups of patients under control:

Group I: Consisted of 57 patients who, during their hospital residence, had been treated with Thorazine and who, after withdrawal of the drug, maintained their improved mental condition and consequently were released from the hospital.

Group II: 82 patients who, during their hospital residence, had received Thorazine and who required to be kept on a maintenance dosage of the drug.

Group III: 21 patients who had been released from a mental hospital 1-4 years ago, had adjusted well until recently, when they began to show symptoms of beginning relapse and for this reason were brought to the clinic in an attempt to prevent their readmission to a mental hospital.

Patients in all three groups were seen regularly once a week. Home visits by a social worker were made occasionally.

Group I: The 57 patients were between 18 and 63 years old. They were diagnosed as follows:

25 Schizophrenics
16 Manic-Depressive, Manics
2 Psychosis due to Alcohol
14 Involutional Psychosis

Nineteen of these patients have had a hospital residence of 3-18 months and had been released on Convalescent Care after several weeks of observation following withdrawal of the drug. Thirty-eight patients in this group had been hospitalized for 2 to 10 years. Sixteen of these patients, who have had such a prolonged hospitalization, had to be placed again on Thorazine a few weeks after their release on Convalescent Care as they began to show restlessness, irritability, anxiety and other signs of returning psychotic manifestations. In 2 of these patients, the return of symptoms came about so rapidly and so fulminantly that they were returned to the hospital immediately. The other 14 patients are now on maintenance dosage of Thorazine and are again symptom-free.

Group II: These 82 patients ranged in age between 17 and 68 years. They were diagnosed as follows:

48 Schizophrenics
19 Manic-Depressive, Manics
4 Psychosis due to Alcohol
11 Involutional Psychosis

Among these patients, 23 have had a hospital residence of between 2 and 10 years and 15 have had 2-9 hospital admissions of various duration. Eleven patients in this group had to be returned to the hospital. For better evaluation of circumstances leading to

[1] Read at the A.P.A. Regional meeting in Montreal, Nov. 8-11, 1956.

[2] After Care Clinic, 2 West 13th St., New York City.

these returns, it seems important to consider the facts in some detail.

Patient, A.H., diagnosed as Manic-Depressive Psychosis, who, on his initial visit to the clinic on the day following his release from the hospital, had been found to be in a pronounced hypomanic state, became assaultive the next day, was taken to the City Jail and from there was returned to the hospital.

Another patient, G.C., diagnosed as Dementia Praecox, Catatonic type, who had been hospitalized for 8 years and who, on her initial clinic visit, was found to be highly confused was returned to the hospital by the family on the day following her clinic visit.

Four patients had not taken the drug as was found out after their return to the hospital.

In 5 of the 11 patients in this group, who were returned to the hospital, the social situation present was extremely unfavorable and in at least 2 cases, it is felt that better placement in the future could make attempts toward social reintegration more successful.

All patients in Group II were kept on a maintenance dosage of Thorazine ranging between 50-150 mgm. daily. They received, at first, the maintenance dosage prescribed at the hospital. However, it was found to be necessary to change the dosage in accordance with the individual requirements, either increasing or lowering it.

Though several patients were reported to have had some side effects from the use of the drug while in the hospital, the only complaints voiced since their release from the hospital were drowsiness, sleepiness, constipation. As many of them stated that these side effects interfered with their work and as it was felt that drowsiness, in particular, might eventually be the cause of some accidents, the dosage was, where possible, adjusted in such a way that the drug was given in one single dosage at bedtime. Where it was felt that an additional dose during the day was absolutely necessary, the patients were admonished to take the morning medication after breakfast and to rest for about one-half hour before going to work. The only side effects occasionally seen in this group were mild skin rashes which easily responded to treatment with hydrocorton ointment.

The importance of *variation* in the maintenance doses administered to each individual patient can be best illustrated in the following two cases:

Patient, A.T., got along well on a maintenance dosage of 100 mgm. Thorazine given at bedtime. She was working, and as her parents with whom she lived were both ailing, she was proud of the fact that she was now not only able to contribute to their actual support, but could also afford some luxuries for them, like a television set which she had bought on installments, etc. One day, her boss had found out that she had been a mental patient and on the ground that she had concealed basic information when applying for the job—she was fired. She became very upset and when seen at the clinic was advised to stay at home for a full week and was placed on 300 mgm. Thorazine (given in 3 equal doses) daily for 2 weeks. During this time, she was visited by the social worker at her home several times in addition to her weekly clinic visits. At the end of the second week, the dosage was again reduced to the previous level of 100 mgm. daily. At the end of the third week she had found another job, and is maintaining her level of adjustment up to date. It is felt that only this quick increase of Thorazine dose prevented complete relapse in this as well as in other similar cases.

Patient, P. O., an alcoholic, who had received 200 mgm. Thorazine daily, complained that he began to feel on the verge of drinking again. The dosage was doubled for 2 weeks and to date, several months later, he has not reached out for the alcohol as yet, and was able to hold his job, while receiving 100 mgm. twice daily.

As patients began to show signs of restlessness, tension, return of symptoms of anxiety, insomnia, failing appetite, it was found that an increase in the chlorpromazine dosage over a few days followed by gradual decrease to the original amount of the drug seemed to control these symptoms so that the individual continues to function on a satisfactory level. As family problems arise and social or economic stress becomes severer, the dosage of the drug seems to require adjustment. It was noted that frustrating life situations precipitate recurrence of symptoms, which if not checked quickly tend to lead to complete relapse.

Group III: This group consists of 21 patients who had been released from a mental hospital several years ago. Five have had several hospital admissions. Only one of them has had Thorazine while in the hospital. As they began to show return of psychotic symptoms, either the patients themselves or their families contacted the clinic asking for advice and assistance. Four of these patients came to the clinic only after

having consulted their family physician who had given them 25 mgm. Thorazine daily for 1-2 weeks and as the symptoms became worse instead of better, they resorted to calling the clinic. As all the laboratory tests had been found normal, they were all placed on 100 mgm. Thorazine three times daily for 2 weeks. During this time, they visited the clinic once a week and were seen by the social worker in their homes twice each week. All but one patient tolerated the drug well and after gradual reduction of dosage are presently found to be symptom-free again. Eight are no longer on maintenance dosage and have gone back to their jobs. Two patients in this group had such a rapid relapse that the symptoms could not be checked by Thorazine treatment on an ambulatory basis and they had to be admitted to the hospital.

The case of A.A. seems to be worthwhile reporting here. He has been hospitalized on several occasions and when released from his last hospital residence 2 years ago, had been in a state of defect, but was able to function on a primitive level, working only in his father's store. When the family called the clinic, it was stated that the patient has reached again a very disturbed state, refused to take care of his personal needs, did not come to the family meals, was withdrawn, did not talk at all. When brought to the clinic, he was found to be completely dishevelled, his hair reaching down to the shoulders as he had refused to see a barber. He was mute and resisted any attempt to get him to answer simple questions. After 2 weeks of 300 mgm. Thorazine daily he was alert, talking, pleasant, clean, he had a haircut, smiled and answered questions readily. The dosage was gradually reduced and presently he is, for the past 11 months, on 100 mgm. Thorazine at bedtime only. During this time, he has applied for a job on his own accord and is working as a garage helper. He spends his free time going to the movies, visiting friends and going to parties. He has recently made a vacation trip to Florida with some friends and is talking about his first experience of flying with great delight.

One patient in this group did not tolerate the drug, but developed symptoms of an allergic reaction, the temperature going up to 104° F. The blood count and differential count had remained unchanged. The drug was immediately discontinued. Therapy was then started again 10 days later with the same untoward response after the second dose, this time of only 50 mgm. per dosage. Thorazine was again discontinued. Though the patient had only 4 days of medication altogether, she became less tense and irritable, and up to date is able to maintain sufficient emotional balance to be able to function at home.

This study has, however, shown some more factors which seem to be too important to be overlooked. The difficulties encountered by many of these patients after their release from the hospital are manifold and are frequently so severe that they are bound to eventually exert unbearable stress resulting in return of psychotic symptoms leading to the patient's return to the hospital.

CASE I.—Jerry B. comes from a broken home. He was 4 years old when his parents separated and was left with his mother. There were no siblings. When he was 8 years old his father, whom he only saw sporadically, remarried. Jerry was always jealous of the children of the second marriage of his father. His own mother had little understanding and patience with him. At the age of 10, he began to have difficulties at school, gradually became more and more aggressive and abusive to other children and at the age of 13 had to be hospitalized. From then on, he was almost continuously in the hospital until finally at the age of 19, after a course of chlorpromazine treatment, was released on convalescent care. He was continued on a maintenance dose and did quite well. He went to trade school and in spite of marked lack of self confidence came out as top of the class at the end of the school year. Throughout this year of convalescent care, his mother showed considerable ambivalence toward him, being one day unduly concerned, the next day openly rejective of him. While in school, he had been able to maintain his level of adjustment in spite of his mother's attitude. However, during vacation time, the difficulties between Jerry and his mother became more and more pronounced, until one day at the clinic he expressed the desire to be returned to the hospital. When questioned about his reason for this, he stated: "Don't you see, neither my mother nor my father cares about me. The hospital is the only real home I ever had." All attempts toward reassuring him were unsuccessful, as were all attempts to place him in a foster home. Two weeks later, the mother reported that Jerry had become very upset and she had had to return him to the hospital.

CASE II.—A.S. who had been in the hospital for about 18 months, was released to the custody of her sons with whom she had lived prior to her hospitalization. On the way home from the hospital, the sons revealed to the mother for the first time that they had moved out of the apartment which the patient had occupied for over 30 years. Moreover, the older son had married and the mother was now faced with the situation of sharing the new apartment, in a completely new neighborhood, with a daughter-in-law, who was a complete stranger. Out of her old possessions, there was not one single item left. It is understandable that this patient became extremely upset and to this day, 6 months later, she still has not made a full adjustment. "I don't know a soul in the vicinity, I can't handle all these new gadgets they bought, I don't know, does the girl live with me or do I live with them?" It is felt that the only reason why return to the hospital was prevented so far is the fact that

she is seen regularly once a week and occasionally more often and supportive therapy is being offered. This, together with the Thorazine maintenance dosage which had to be adjusted several times according to needs, seems to have kept her out of the hospital up to date.

CASE III.—Mrs. C.M. had been hospitalized for over 4 years. In spite of the fact that her husband during the years of her absence had become an alcoholic, she not only adjusted well to life in the community, but even managed to get him to stop drinking, took complete control of her household, took active part in the parent-teacher organization of her sons school and lead again a normal social life. All went well for 8 months during which she was kept on a maintenance dose of 50 mgm. Thorazine daily. Three months ago, when visiting the clinic again, she was found to be tense and quite upset, looked drawn. When asked about the reason for this, she started to cry and gave the following tragic account:

Her 15-year-old son when running after another boy had fallen and injured his right knee. As the pain persisted he was taken to the family physician and in the course of examinations it was found that there was a malignant tumor of the femur. He was admitted to the hospital for observation and she had just received word that a high amputation would have to be performed and that even with this operation chances for his survival were rather poor. In response to this sad news her husband has started to drink again. Upon her own request she visited the clinic more frequently and her Thorazine dose is being adjusted from week to week. The boy, now after a high amputation of the right leg is still hospitalized and she visits him regularly every day. She has learned to face the situation and is even able to give her husband so much support that he can stay away from the alcohol. She is fully aware of the fact that her boy's days are counted. It is felt that both supportive therapy as well as the Thorazine have so far helped this woman to maintain her emotional balance and have prevented a relapse in this patient, who without this, undoubtedly and understandably would have broken down under the impact of a cruel fate.

In summarizing what has been observed so far, the study seems to indicate that there are far less untoward side effects caused by chlorpromazine even when taken for a prolonged period of time than might have been anticipated. But, it appears to be imperative that these patients be seen regularly for proper control of dosage, not only in order to avoid unpleasant complications, but also to vary the dosage according to individual needs, taking into account the increased stress situations which have to be faced by these patients outside the hospital.

It seems that a single daily dosage given at bedtime (50-150 mgm. Thorazine) can in the majority of cases supply a sufficient amount for the maintenance of the level of improvement and, at the same time, keep the patient from suffering from drowsiness and other side effects which might interfere with work. This is important because of the 82 patients presently on maintenance dosage, 58 are working, 41 of them receiving a bedtime dosage only.

Patients who have had a long duration of illness always seem to require a maintenance dosage, as they do show, sooner or later, return of psychotic symptoms when the drug is discontinued.

Another important reason for seeing these patients in regular and frequent intervals is the need to determine whether or not the drug is actually being taken. It happened on various occasions that patients when coming to the clinic were noticed to be tense, irritable. Investigation frequently revealed that the drug had not been taken for several days. Stress situations requiring change of dosage can, too, be discovered in due time, only, if these patients are seen frequently enough.

Social factors should be kept in mind as they can eventually cause failure in the attempts toward readjustment of these patients. Then Thorazine, a most effective and valuable weapon in our fight against mental illness, could be discredited as ineffective where so frequently unfavorable social situations are actually to be blamed for these patients' return to the hospital.

RESULTS OF FOUR YEARS ACTIVE THERAPY FOR CHRONIC MENTAL PATIENTS AND THE VALUE OF AN INDIVIDUAL MAINTENANCE DOSE OF ECT

GUNTHER E. WOLFF, M.D.[1]

More than 4 years have passed since we started a more active treatment for our geriatric female mental patients at the Camarillo State Hospital. The *systematic* use of ECT for this type of elderly patient has never been attempted before though some are on record who have received occasional ECT for acute emergencies.

It was our hope to relieve the condition of the most pitiful patients. Some were completely withdrawn, refused to eat, tried to commit suicide or in a most morbid way played with or ate their excrements. Others were destructive to themselves or their surroundings, tearing up their mattresses, banging the doors, screaming at the top of their voices or attacking patients and attendants if not heavily sedated or in restraint. Certainly this was a life so full of suffering and misery that it far surpassed any we had encountered in patients afflicted with cancer or other chronic organic illnesses.

ECT is a well established procedure in our armamentarium and we like to call it the "surgery" in psychiatry. In spite of this fact no treatment in any field of medicine has been so handicapped by sharp and unjustified criticism. This was never more evident than during the last 2 years when the pages of our medical journals have become crowded with articles concerning the tranquillizing drugs. Instead of waiting to ascertain that no side or after effects of these helpful drugs might develop, statements have been made again and again that these drugs will reduce or eliminate ECT. One article from a quite prominent author even went to the extent of saying "Electric shock is not only dreaded by patients, but also fails to show permanent therapeutic results except in depression" (is that nothing?). "Less dramatic and brutal than Electric Shock, insulin therapy also has only transitory effect on Schizophrenics." Notwithstanding this widely held opinion nothing has convinced us more of the value of ECT in certain cases than our results during the last 4 years. We have been using every method to help our patients. Many have become more cooperative, relaxed and amenable to psychotherapy with tranquillizing drugs. However, quite a number could not maintain their improvement and others continued to be very disturbed, either depressed or hyperactive. They received ECT and the majority have shown improvement which no other therapy had accomplished.

Of 200 patients now on active treatment, 61 are receiving tranquillizing drugs only; 82 are on ECT only; and 57 are on ECT plus tranquillizing drugs.

We were fully aware that our work involved calculated risks such as complications from the cardiovascular system or occasional fractures. If these had materialized part of our purpose might have been defeated; however, none of these accidents occurred and our initial results were very impressive and encouraging. We wish to mention here that we might have been easily misled. During the initial period we had 2 patients approved by staff for ECT; one of them died from an acute coronary thrombosis the day she was approved and another the day after approval, from a cerebral hemorrhage before having received *any* treatment. If they had received even one treatment, who could have judged whether or not death was the result of ECT?

From the outset we *never* believed that the "death fear" or the "feeling of punishment" could be responsible for the good results of ECT, an opinion which unfortunately is still prevalent. We were very much impressed by the work of Funkenstein and his co-workers who since 1949 have proven that in many mental conditions, a disturbed homeostasis of the autonomic nervous system is present and that after successful electric convulsive treatment, homeostasis is reestablished. In the last few years research has further brought out the fact that bio-

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chemical and physiological changes in the brain tissues of mentally disturbed patients are responsible for their illness, and that these changes are often reversible. We older physicians still remember our utter ignorance of the cause of diabetes or pernicious anemia until the discovery of insulin and the liver enzyme changed the whole aspect of these often deadly diseases. Is it not possible that we are standing at the threshold of a similar development for mental illness? It only seems that the clinicians are still very reluctant to recognize and follow the genius of research, a fact not unknown in medicine.

From August 1952 until September 1956 we have been treating 505 patients with ECT; of these about 350 are elderly, mostly bed ridden patients more or less in need of general care. However, a few of them are so mentally disturbed and upsetting to the others that in spite of their advanced age, they have been receiving ECT for more than 3 years and without any exception have greatly benefited from it.

The histories of a few typical cases follow:

19620—C.P.: This patient was committed on August 30, 1948, and diagnosed chronic brain syndrome associated with cerebral arteriosclerosis with psychotic reaction. She was a very frail person refusing food, combative and resistive so that she had to be frequently in restraint or seclusion. She responded very well to a few ECT, went on convalescent leave from February to June 1949 and was returned because of a complete relapse. She responded well again to 14 ECT and went on another convalescent leave from October to December 1949. These ups and downs continued. However, she is now on a maintenance dose of ECT, about 2 treatments every 3 weeks, which avoids any relapse. She is pleasant, cooperative, in very good contact and has a good insight. She has received altogether 242 ECT. Her present age is 82.

34476—S.A.: This patient was committed on March 3, 1953, and diagnosed chronic brain syndrome with senile brain disease with psychotic reaction. She was very agitated, destructive, combative, belligerent and noisy. She improved on ECT. It is necessary to keep her on a maintenance dose of one treatment a week and in this way she is friendly, cooperative and even cheerful. She has had 142 treatments. Her present age is 88.

28846—H.E.: This patient was committed on October 9, 1951, and diagnosed chronic brain syndrome with senile brain disease with psychotic reaction. She was depressed, not eating and so feeble that the admission physician wrote "no ECT." She was also very combative and noisy at the same time. She was physically and mentally deteriorating and staff finally approved ECT. She improved after a series of 14 ECT and is holding well with 1 treatment every 2 weeks. Altogether she had 119 treatments. Her age is 83.

32941—D.M.: This patient was committed on October 23, 1952, and diagnosed chronic brain syndrome with senile brain disease with psychotic reaction. She was very depressed, refused to eat and became bed ridden. A series of ECT improved her very much and now she is on one treatment a week, able to sit up, eating well and in fair contact. Her age is 90.

The establishment of a "maintenance dose" of ECT for most of our patients has helped us to make them comfortable and not only add "years to life" but "life to years."

The patients were diagnosed as:

Chronic brain syndrome with cerebral arteriosclerosis or senile brain disease with psychotic reaction	200
Involutional psychotic reaction	91
Schizophrenic reaction, various types	94
Manic-depressive reaction, manic or depressed type	36
Chronic brain syndrome associated with diseases of unknown or uncertain cause (Pick's and Alzherimer's Disease)	5
Chronic brain syndrome associated with convulsive disorder with psychotic reaction	24
Psychoneurotic reactions, various types	12
Chronic brain syndrome associated with disturbance of metabolism, growth or nutrition with psychotic reaction	8
Chronic brain syndrome associated with alcohol intoxication with psychotic reaction	18
Chronic brain syndrome associated with central nervous system syphilis with psychotic reaction	4
Chronic brain syndrome, multiple sclerosis with psychotic reaction	6
Chronic brain syndrome with intracranial neoplasm with psychotic reaction	3
Mental deficiency with psychotic reaction	4
	505

The age distribution of our patients will be shown by the following table:

Under 50	50-60	60-70	70-80	80-90	Over 90	Total
57	128	190	75	51	4	505

These patients were selected from the following types of wards:

I The most disturbed with a population of 100
II A chronic senile ward with 111 ambulatory patients
III A chronic senile ward with 121 patients who had to be fed on the ward because they were too feeble to go to the dining room. (Actually old people who needed general care.)
IV Two senile bed wards with a population of 180

V An infirmary ward with about 100 elderly patients suffering from one or another organic disease.

Before we started this form of therapy we had daily to give on Ward I sedation by hypo to about 15 patients, we had to feed by spoon or tube about 20 and to keep in seclusion or restraint 8 to 10. Now all patients are able to go to the dining room; we give monthly only 2 to 3 sedations by hypo, mostly to patients who are newly admitted. There are none in seclusion or restraint. The whole atmosphere on this ward has so changed that the attendants are now able to spend their time discussing the patients' problems with them instead of being constantly on the alert against fights or destructiveness. By eliminating the very disturbing elements by means of this therapy, it has helped to improve the condition of many other patients. Many of the medical and nursing staff of this hospital have remarked about the complete change in the behavior and attitude on this once very disturbed ward.

Since August 1952 we have been able to send on convalescent leave from the Very Disturbed Ward I, 56 patients; 41 of whom had EST. Ward II, 103 patients; 46 of whom have had EST.

We feel we can be proud of this accomplishment which compares favorably with the results of active treatment wards. We were actually dealing with chronic "custodial" patients who previously were only rarely able to go on convalescent leave. This was not a "pilot study," but accomplished with the not very numerous personnel on this type of ward. We have treated to date almost 700 patients with more than 22,000 ECT. We were fortunate to have no cardiovascular or other serious complications in spite of the advanced age of most of our patients. We had about 25 fractured bones (vertabrae, hip, pelvis and forearm, in this order). During the same period on the same service we had over 178 fractures due to falls and other reasons.

Let me emphasize that in ECT as in any other form of therapy the attitude of the whole nursing staff and the physician is of utmost importance. They all must have confidence and be optimistic about this treatment and by their attitude transmit this feeling to our patients. None of our attendants are allowed to convey the slightest impression that this treatment is a kind of punishment, or dare to threaten a patient with it. No patient is ever surprised with ECT. They are always told in advance, even if they are very disturbed, that this electric treatment will help them. Only a few remain resistive, and these actually are those who refuse any medication or fight injections with all their strength. Those who were apprehensive were sedated in the beginning until they lost their fear after realizing that we were helping them. Only 2 continue to require sedation before each session. We wish to emphasize that ECT should be given by the physician in charge of the patient and not by a special ECT team who can have only very little knowledge and contact with each individual. The close observation of our patients and the favorable results of our active therapy have intensified in us the feeling, well supported by the latest research, that ECT must produce a biochemical or other form of metabolic change in the brain. From my experience of 25 years in internal medicine, I have learned that some diseases will never be cured permanently and that certain patients are able to carry on only by getting a maintenance dose of their medication whether this is digitalis for the chronic cardiac, insulin for the diabetic or B-12 for the pernicious anemic. No doctor would ever dream of discontinuing an established maintenance dose because he would know that he might endanger the health or even the life of his patient. We felt that a similar consideration should be applied to ECT. From the moment that this idea capitivated us, we have tried to find for each of our patients her maintenance dose by closely watching her mental pattern. After a level of improvement is maintained we never wait for a complete relapse, but give the next treatment the moment we observe the slighest regression. Some patients need their treatment weekly, some every 2 weeks, some in monthly or longer intervals. In this way we have been able to maintain the improved atmosphere on the whole ward as mentioned before. The correctness of these observations is substantiated by the facts that:

a. When these established maintenance

doses were discontinued while the routine ward doctor was away, the disturbing elements broke through again.

b. Quite a number of patients who are out on convalescent leave and receive their established maintenance dose of ECT have now been out for more than 18 months; previously, they had to be returned to the hospital every 3 or 4 months because of a relapse.

Summary

This paper reports:

a. The results of 4 years active therapy on custodial wards with geriatric female patients.

b. The benefit and limitation of tranquillizing drugs.

c. The value of ECT as "surgery" in psychiatry.

d. The importance of establishing a maintenance dose of ECT for each individual patient.

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PSYCHOPHYSIOLOGICAL GASTROINTESTINAL REACTIONS

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Before discussing psychosomatic gastrointestinal symptoms, a review of the nerve innervation of the gastrointestinal tract is desirable, so that we may have a better understanding of psychosomatic G.I. symptoms.

The esophagus and stomach are supplied by the right and left vagus nerves. The liver is innervated by the left vagus. The small intestine is supplied by the vagi and the sympathetic nerves. The large intestine receives its nerve supply from the sympathetic. The pancreas is also supplied by the sympathetic nerves. The descending colon and rectum are supplied by the pelvic plexuses. The abdominal viscera receive both sensory and motor branches from the thoracolumbar division of the sympathetic and the sacral division of the parasympathetic.

There are a number of sympathetic ganglia and plexuses. Some of the plexuses are paired, namely: phrenic, suprarenal, renal; also the spermatic in the male and the ovarian in the female. Unpaired plexsuses are the aortic, hepatic, splenic, superior gastric (coronary), inferior gastric, superior mesenteric and inferior mesenteric. There are several sympathetic ganglia in the abdominal cavity, largest of these are the celiacs. The lumbar ganglia are composed of 3 to 8 pairs, usually 4. Four small sacral ganglia are usually found. From this review, it is apparent why we can have various dysfunctions in the abdominal area.

The abdomen is usually known as the sounding board of the emotions. We find frequent psychophysiological reactions in the gastrointestinal tract. Not only functional disorders, but also gross organic lesions can be caused by emotional stimuli. The most prevalent functional disorders include anorexia nervosa, nervous vomiting, constipation, nervous diarrhea, nervous indigestion, irritable colon, belching, epigastric distress, "butterflies" moving inside, flatulence from fright or hurt. The disturbances of function may lead to organic lesions such as peptic ulcer and ulcerative colitis. A difficult environment may precipitate the organic lesions. Removal to a more wholesome environment may lead to a striking improvement. The total organism may need treatment. The esophagus and colon are proximal to branches of the central division of the nervous system and are more vulnerable to the emotions.

We must remember that G.I. complaints are encountered in many neurotic and functional reactions. They are encountered in the depressed phase of manic-depressive reaction and in schizophrenic reactions. Many patients have experienced sudden cessation of nausea and vomiting once they are removed from the noxious environment or situation. Unconscious mental conflicts can cause vomiting, the patient literally cannot "stomach" the situation. It is a physical manifestation of an escape mechanism. Vomiting of bile-stained fluid may indicate abdominal migraine. We should inquire if the patient suffers from migraine headaches. Nervous diarrhea, nervous colitis, spastic colon and irritable colon are looked upon as different manifestations of the same condition. The colon is sensitive to emotions and nervous tension. Family jealousy, parental domination, marital conflicts, family insecurity, morbid fears, frustrations, business reverses, family quarrels, sudden shocking news, identification with illness or death of a member of the family or a close friend, may, by suggestion, cause functional suffering in a predisposed individual.

Gastrointestinal functional complaints are usually of long duration with much detail, related to stress, and pain tends to shift. Once the patient goes to sleep, it is uncommon to be awakened by pain: an important differential point in relation to organic pain.

Anorexia nervosa represents punishment of self or others. Attempts to gain affection may be a motive. On the other hand, martyr complex or deep seated death wishes may lead to the anorexia. Figuratively, the stomach being moronic cannot distinguish be-

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tween hunger for food and hunger for affection.

Cardiospasm is considered to be more than a neurosis. The nerve plexuses at the cardia may be diseased. In many cases, dilatations will relieve the symptoms. Anthral spasms may be precipitated by emotional reactions.

Peptic ulcer is an organic disorder with close relationship to the emotions. Prolonged frustrations, supressed emotions, may aid in ulcer formation. Constant bombardment of the nervous system by the emotions may increase the reaction of hyperacidity in ulcer formation. The ulcer patient is usually rigid, a chronic worrier, overconscientious, and aims at perfectionism. For best results, diet, chemotherapy and psychosomatic measures are necessary. A patient must learn to live with the ulcer and also how to live with it.

In nervous colitis, there is no colitis inflammation of the colon. There is sensitivity to stress, anxiety and tension. A psychic strain may lead to sudden "cramps," desire to have a stool with only passage of flatus, foam and a small amount of fluid.

Ulcerative colitis is another serious disorder in which the psychiatric complaint in the etiology is preponderant. Psychic factors cannot produce actual ulcers of the "bowel." A personality study is helpful towards treatment, usually emotional conflicts exist. Besides antibiotics, sulfonamides, and at times, cortisone, management and guidance of situational reactions is essential for the best results. The colon must be removed from irritating personal problems so that it can be peaceful from these irritating factors. It can then take care of its bacterial invaders and amelioration will be evident.

In the diagnosis and treatment of psychophysiological reactions, we must rely on:

1. A good history by systems, past history, and family and personal history. A Cornell Index questionnaire is very helpful.

2. Careful laboratory studies are essential, including X-rays, blood studies, stool research, and various metabolic evaluations. Allergic studies may be necessary.

3. A complete physical and neurological examination.

4. Psychological studies are usually helpful in evaluating personality factors.

5. Psychiatric interviews are essential.

6. Special diets are usually indicated, chemotherapy in the form of sedatives, antispasmodics, and tranquilizing drugs.

7. In severe cases, shock therapy may be indicated as an aid towards improvement.

8. Telling the patients the illness is in their mind and that they will have to get over it themselves, leaves a bad taste. These persons are ill. They need support and aid towards solving their problems, and must receive interested attention.

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CLINICAL NOTES

A PRELIMINARY REPORT ON MARSILID

FRANK J. AYD, JR., M. D.[1]

Recently Marsilid (iproniazid) has been heralded as a new "psychic energizer" which elevates mood, stimulates appetite, increases weight, and restores vitality. Because of these effects Marsilid is recommended for treating mild depressions in ambulatory, non-psychotic patients and for stimulating appetite and promoting weight gain in debilitated patients. It is also suggested for hospitalized psychotics with severe depression or regressions.

Marsilid was prescribed for 14 men and 36 women (ages 22-70) who were diagnostically categorized: psychoneurosis—depressive reaction 12, hypochondriacal reaction 2, asthenic reaction 3, manic-depressive reactions—depressed 16, involutional depression 10, and schizophrenic reaction 7. Their essential complaints were weakness, lack of energy, easy fatiguability, loss of interest, and feelings of dejection, insomnia, anorexia and weight loss. All patients were ambulatory.

Marsilid was administered without comment as to what it was, or the expected clinical response. Ten patients were given the drug in addition to other medication, 12 were started on an inert placebo followed by Marsilid, 15 received Marsilid alone, 13 were given Marsilid plus 5 mg. of d-amphetamine.

The usual dose for severely depressed and debilitated patients was 50 mg. 2 or 3 times daily. Mild and moderately ill patients were given 25 mg. 2 or 3 times a day. Except for those intolerant of Marsilid or who refused to take it because of side effects, all patients received the drug for more than 3 months.

Because Marsilid is a slow-acting drug, therapeutic response did not occur before the third week of treatment. However, side effects were noted shortly after the institution of therapy. The drug had to be discontinued because some patients developed anxiety over autonomic side effects, severe postural hypotension, paranoid reaction with excitement, hypomanic psychosis, severe dyspnea, cardiac failure and enhanced depression. Common side effects were dryness of the mouth, blurred vision, constipation, delayed micturition, paresthesias and dizziness. Other patients had hyperreflexia, neuralgic pains, weakness and fatigue, itching, sweating, diarrhea, drowsiness, insomnia, and were sexually impotent. There was no positive correlation between dosage, duration of Marsilid therapy and the occurrence of side reactions. Some patients were able to tolerate 150 mg. daily, while others had serious reactions on 50 mg. a day.

The results obtained in the 39 patients who received Marsilid for 3 months were assayed by the following criteria: (1) improvement: almost complete symptomatic remission from depression and/or debilitation and (2) partial improvement: sufficient symptomatic relief to permit the patient to function more efficiently. By these standards 5 were improved, 19 partially improved, 15 were unimproved. If the 15 unimproved are combined with the 11 patients who had to be dropped because of side-effects then over half of the original patients started on Marsilid did not benefit from this drug.

Psychotherapy was an essential for patients treated with Marsilid. This drug is not always a psychic energizer. It may be a tranquilizer or a psychotomimetic drug. Although potentially useful, it should be prescribed cautiously for ambulatory patients who can be carefully supervised.

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TREATMENT OF PSYCHOSES WITH A COMBINATION OF PACATAL AND THORAZINE[1]

MANFRED BRAUN, M.D.[2]

The rationale for using a combination of Pacatal and Thorazine, in the treatment of psychoses, was suggested by Hiob and Hippius(1) and by Bowes(2). The former demonstrated that the combination proved highly beneficial in treating patients who were resistant to ECT or resistant to therapy with one of the drugs alone. Furthermore, the smaller dosages employed decreased some of the common side effects. Bowes pointed out that the more pronounced parasympatholytic action of Pacatal is balanced by the more pronounced sympatholytic action of Thorazine. Moreover, Pacatal was found to be midly euphoriant, whereas Thorazine was more sedating.

Our preliminary clinical trials with this Pacatal-Thorazine combination revealed that the outward behavior manifested by these patients offered a practical guide for estimating the initial dosage ratio employed. Therefore, we classified the 42 schizophrenics in this series into 2 categories. Group I contained 20 patients whose behavior was characteristically overactive and agitated. In contrast, the behavior of 22 patients in Group II was characteristically lethargic, withdrawn and asocial.

Taking advantage of the sedating action of Thorazine, the patients in Group I were started on a combination of Pacatal, 50 mg. b.i.d., and Thorazine, 50 mg. q.i.d. Many were adequately controlled at this dosage level. In those instances where additional sedation was required, the dosage of Thorazine was increased to 100 mg. q.i.d. and the Pacatal dosage remained at 50 mg. b.i.d. Whatever adjustments in dosage were made, the final dosage was gradually reduced to a maintenance dose of Pacatal, 50 mg. b.i.d., and Thorazine, 50 mg. q.i.d.

Utilizing the euphoriant effect of Pacatal, patients in Group II were given Pacatal, 50 mg. q.i.d., and Thorazine, 50 mg. b.i.d. Individual patient requirements necessitated dosage changes but the maintenance dose arrived at for most patients in Group II was Pacatal, 50 mg. b.i.d., and Thorazine, 50 mg. b.i.d.

Eighty-eight per cent of the 42 patients, all of whom were schizophrenics and refractory to all other medications, demonstrated a considerable improvement. No side effects were observed and all blood studies were found to be negative. Blood pressures remained normal. A typical case history illustrates the response obtained by most patients.

Seventeen year old female. Catatonic schizophrenic with episodes of excitation and stupor. She had been hospitalized for past 2 years and during this period received all indicated therapy, including ataractic agents, without responding in a satisfactory manner. Pacatal, 50 mg. b.i.d., plus Thorazine, 50 mg. q.i.d., was then substituted for all other medication. This initial dosage was changed after a few days to Pacatal, 100 mg. b.i.d., and Thorazine, 100 mg. q.i.d. Within a few days a favorable response was noted and the dosage was gradually reduced to Pacatal, 50 mg. q.i.d., and Thorazine, 100 mg. q.i.d. The degree and type of improvement was remarkable. The prompt disappearance of the frequent episodes of excitation and stupor, characteristic of her previous behavior, represented a basic change. She spontaneously asked ward attendants to provide work and some activity. This obvious improvement in affect had never occurred before. She has now been participating in group activity for over 3 months and her outlook is good.

[1] This study was carried out at Cleveland State Hospital, Cleveland, Ohio.

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THE USE OF HEXAFLUORODIETHYL ETHER (INDOKLON) AS AN INHALANT CONVULSANT

AUGUSTO ESQUIBEL,[1] JOHN C. KRANTZ, JR.,[2] EDWARD B. TRUITT,[3] AND ALBERT A. KURLAND[4]

Although hexafluorodiethyl ether (CF_3 CH_2-O-CH_2CF_3) was originally synthesized for the purpose of determining whether it possessed anesthetic properties, it was found that the inhalation of its vapors produced convulsive seizures in many species of laboratory animals.

This drug is now being investigated concerning its usefulness as a convulsant in the treatment of hospitalized psychiatric patients. To date a total of 434 treatments have been administered to a group of 40 patients. The only complication so far observed has been a compression fracture of a thoracic vertebra. Routine laboratory studies of blood, urine, and liver function as well as EKG studies have disclosed no abnormalities.

The procedure for administering the drug is through the use of a Stephenson mask modified appropriately with one way valve to which the Indoklon vaporizer can be attached and the exhaled vapor absorbed by an activated charcoal exhalant(1). The dosage used varies according to the individual but remains within the range of 0.3 cc. to 1.5 cc. Treatments were given three times a week, and each patient received, on the average, 12 treatments.

The time required to induce convulsions varies with each individual treatment, but has averaged about 30 seconds. The seizure begins with a few premonitary myoclonic jerks which are followed by the onset of a tonic phase without the marked "jack-knifing" effect so characteristic of the onset of electroconvulsive therapy. There also seems to be less apnea associated with this treatment than with electroconvulsive therapy, and less confusion and psychomotor activity in the immediate post-convulsive period.

Subjectively, a great many of the patients who have experienced this procedure and who have had electroconvulsive therapy in the past, while not feeling enthusiastic about either treatment seem to feel less threatened by the convulsive inhalant. In those patients who have developed an intense apprehension to electroconvulsive therapy, this offers an alternate choice which is more acceptable to the patient. Whether this type of treatment brings about the degree of post-convulsive amnesia and confusion as that produced by electroconvulsive therapy is being investigated by means of psychological studies but as yet sufficient data are not available to make any statements.

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CASE REPORTS

A CASE OF AGRANULOCYTOSIS FOLLOWING "SPARINE" ADMINISTRATION

MELVIN J. REINHART, M.D.,[1] BERNARD S. SILVERSTEIN, M.D.,[2] AND THOMAS N. CROSS, M.D.[1]

Since few cases of agranulocytosis have been noted following Sparine administration, it seemed wise to us to report the following case.

M. S., a 49-year-old male, was admitted to the Neuropsychiatric Institute May 25, 1957. A diagnosis of schizophrenic reaction, undifferentiated type, chronic, was made at the time of admission. In 1949 and 1955 a similar diagnosis was made on admission to a state hospital. He received electroconvulsive therapy on both occasions. Following the ECT in 1955, the patient was placed on Thorazine beginning with a dosage of 25 mg. t.i.d. which was increased to 100 mg. t.i.d. 4 days later. After about a month he developed clay-colored stools, icteric sclerae, low-grade temperature, and a generalized pruritis. His serum bilirubin was 4.5. Urinalysis showed a trace of albumen and a positive test for bile pigment. The hemoglobin was 16.6 grams and the white blood cell count was 6,650 with a normal differential (polymorphonuclears 70%, lymphocytes 23%, monocytes 6%, basophils 1%). The thymol turbidity was 1.6 units. According to history, the patient's symptomatology cleared spontaneously following the withdrawal of the drug.

On admission to the Neuropsychiatric Institute, 2 years later, the patient was placed on 50 mg. of Sparine q.i.d. The next day the dosage was increased to 100 mg. q.i.d. and 2 days after admission Ritalin, 10 mg. t.i.d. was added to combat an increasing depression. Sparine and Ritalin were continued at these dosages for 6 days, until June 4, when because of progressive agitation the Ritalin was discontinued and the Sparine was increased to 250 mg. q.i.d. Because of increasing lethargy the Sparine was decreased to 150 mg. q.i.d. on June 10.

The admission physical examination revealed no abnormalities. As there was a history of subtotal thyroidectomy in 1942, thyroid studies were initiated May 29. A BMR was plus 22% and serum cholesterol 126 mg. %. Hemoglobin was 14.9 grams or 95% and the white blood cell count was 5,700. Urinalysis and chest film were negative.

Because of pitting edema of the lower extremities, exertional dyspnea, and increasing fatigue the patient was felt by the medical consultant on June 10 to have arteriosclerotic heart disease with hyperthyroidism. Digitalis and thiomerin were administered on June 11. The next day a PBI was reported as 11.3 gamma % with inorganic iodine 1.8 gamma %. His temperature on June 12 was 102.6° orally with a pulse rate of 120. An electrocardiogram revealed only sinus tachycardia. It was felt by the consultant that the diagnosis at that time was "thyrotoxicosis with a question of borderline thyroid storm."

A CBC done at the time of transfer to internal medicine June 12 revealed a white blood cell count of 2,700 with a differential of 90% lymphocytes and 10% monocytes—no granulocytes were seen. Although Sparine was immediately discontinued, the patient's temperature rose to 104° rectally, occasionally spiking to 105.6°. The febrile course continued despite massive doses of antibiotics.

On June 13 the total serum bilirubin was 2.3 mg. % with a BSP retention of 38%. With a progressive jaundice the white blood cell count dropped to 550 on June 20.

A bone marrow examination June 13 revealed "megakaryocytes are present in normal numbers forming platelets. There is no

[1] From the Neuropsychiatric Institute, Ann Arbor, Michigan.

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evidence of granulopoiesis. Erythropoiesis is normoblastic with some cells showing rather clumped chromatin patterns. Plasma cells are numerous, most mature in appearance but some show nucleoli and have light blue vacuolated cytoplasm. An occasional reticulum cell is seen. Mast cells are not seen." [3] This was interpreted to represent a more severe bone marrow damage than the maturational arrest usually seen in agranulocytosis.

On June 22 the temperature dropped to normal levels and remained there for several days. The white blood cell count on June 25 was 22,600 with 82% granulocytes on differential (blastocytes 1%, progranulocytes 6%, myelocytes 7%, metamyelocytes 8%, bands 22%, segs 38%). His physical condition improved markedly. The jaundice cleared entirely by June 28. Subsequently the patient encountered complications including a septicemia and a bronchopleural fistula and at the time of this writing is on the critical list.

This is the only case of agranulocytosis following Sparine administration observed at our institute. Unlike the few previously reported cases there was a lapse of 12 days following the discovery of agranulocytosis before evidence of granulopoiesis was noted.

In view of this experience and the reports of hematologic evidences of toxicity with other phenothiazine derivatives we have begun a program of weekly WBC for one month on all patients starting on these drugs. The following month fortnightly checks are made. It is also essential to carefully evaluate the symptomatology of all patients on these drugs in order to detect early evidence of toxicity since the WBC can change precipitously from day to day.

[3] Bone marrow report courtesy of Dr. Ronald C. Bishop, University Hospital, Ann Arbor, Michigan.

"PARADOXICAL" EFFECT OF CHLORPROMAZINE IN A CASE OF PERIODIC CATATONIA

WALTER KRUSE, M.D.[2]

A small number of schizophrenic patients, when placed on chlorpromazine, show increasing restlessness, agitation, and outbursts of aggressive behavior. This is not a transitory effect comparable to the "turbulent phase" in reserpine patients but it continues as long as chlorpromazine is given. A similar "paradoxical" effect was observed in the following case of periodic catatonia.

Our patient is a 50 year old white male whose mental illness began when he was 30. He was restless, excited and had auditory hallucinations. He made a fair recovery, but 6 years later he became ill again, and since then he has suffered periodic psychotic episodes, always characterized by excitement, extreme psychomotor activity, personality disintegration, disordered thinking, auditory hallucinations and delusional ideas. The phases of excitement began with the appearance of tension, restlessness, abnormal irritability, flushing of the face, and insomnia. At the end of each phase he would sleep for 1 or 2 days. During the "free" interval he was able to work in the hospital and did not show any gross psychotic symptoms. From 1953 to 1955 exact records were kept, and the total of excited periods amounted to 32% while the "free" intervals were 68%. The duration of excited phases was most often 2 to 3 weeks, that of the "free" intervals usually between 3 and 6 weeks.

In November, 1955, he received a combined medication of up to 400 mg. chlorpromazine plus 4 mg. reserpine daily, for the following 6 months chlorpromazine only. The average daily dose was 150 mg. i.m. or 300 mg. p.o. During this period of treatment our patient's condition deteriorated markedly. The excited phases became longer and followed upon each other in rapid succession. They reached a degree of utmost severity. There were only 104 days of "free" interval and 115 days of excitement. (Following this 7 month period chlorpromazine was discontinued and Ext. Thyroid was given with immediate beneficial results.)

In trying to explain the "paradoxical" effect of chlorpromazine, Selbach's "principle of the regulatory circle"(1) has proved helpful. Autonomic centers in the diencephalon seem to play the central role in the periodic changes of this rare type of catatonia. A shift in the balance existing between the centers of the ergotropic (sym-

[1] This study was made at the Vermont State Hospital. I should like to express my gratitude to Dr. R. A. Chittick, Superintendent of the Vermont State Hospital, for his helpful suggestions.

[2] Address: Box 50, Hathorne, Mass.

pathetico-adrenal) and trophotropic (vago-insulin) systems is accompanied by a change in the clinical picture. Gjessing and other workers in this field agree that in the "free" interval there is a shift in the balance toward the trophotropic side. The phase of excitement, according to Selbach's principle, would then represent a secondary compensatory ergotropic reaction, an adjustment mechanism to counteract the maximal trophotropy. At the end of the excited period there is a lytic return to the equilibrium via the sleep phase. In considering the essentially trophotropic action of chlorpromazine, the "paradoxical" effect in our patient seems not surprising. Chlorpromazine medication during the "free" interval led to an increased trophotropy in our already trophotropic patient and aggravated the existing disturbance of the autonomic centers. The maximum trophotropy was reached in a shorter time, thus reducing the "free" interval. The resulting compensatory ergotropic adjustment reaction (excited phase) could then be expected to be of a more severe nature.

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AGRANULOCYTOSIS DURING TREATMENT WITH METHYLPROMAZINE[1]

PAUL E. FELDMAN, M.D. AND JEROME STATMAN, M.D.[2]

Reports of agranulocytosis as a complication of phenothiazine therapy are appearing with increasing frequency. A review of the current literature indicates that this untoward effect of therapy may be more common than the often quoted incidence of 1:50,000-100,000(1). It is impracticable with the available data to attempt to estimate the number of cases of agranulocytosis which may have occurred. Individual reports have listed an incidence as high as 1:700(2) or 1:400(3). Pollack(4) in his review of the literature quotes an incidence as high as 1:150.

Pooling all data, it appears that the average patient who develops agranulocytosis during the course of phenothiazine therapy may be a female in her late 50's who has been treated for approximately 6 weeks prior to the onset of symptoms. Her chances of surviving this complication are 2 out of 3.

The medical regime for the management of agranulocytosis has been fairly well standardized, and with minor exceptions, is the same throughout the country. It consists of:

1. Immediate cessation of phenothiazine therapy.
2. Massive doses of antibiotics.
3. Non-specific supportive measures (pentonucleotides, parenteral fluids and liver extracts).
4. Symptomatic medication.

The use of steroids is of questionable benefit. Although agranulocytosis is thought to be an allergic phenomenon and steroids are known to stimulate the release of neutrophiles if the precursors are present in the bone marrow, steroids suppress the connective tissue reaction and this is of great importance when there is an absence of granulocytes. The transfusion of whole blood has been accompanied by a higher than average mortality and this treatment has therefore fallen into disfavor.

The following case is reported not because the incidence, treatment or symptomatology was unique but because this is the first reported case of agranulocytosis occuring during treatment with a new phenothiazine compound.

Case Report.—Seventy-seven-year-old, white male. Diagnosis—Chronic brain syndrome associated with cerebral arteriosclerosis with mild congestive failure secondary to arteriosclerotic heart disease. Routine laboratory studies were within normal limits.

Shortly after admission, treatment was started with Methylpromazine, 25 mgm t.i.d. and 25 days later the dosage was increased to 50 mgm t.i.d. On the 45th day the dosage was again increased to 75

[1] 10-(3 dimethylaminopropyl)-2-methyl phenothiazine hydrochloride.

[2] Topeka State Hospital, Topeka, Kansas.

mgm t.i.d. On the 51st day of treatment the patient appeared ill, temperature 101.6 (R) and had slight pharyngeal injection and gingivitis. X-ray revealed minimal bronchopneumonia in the left base and a throat swab grew alpha streptococci (viridans). W.B.C. was 2,800 with 1% eosinophiles and 99% lymphocytes.

Methylpromazine was discontinued and patient was placed upon a treatment regime which included 1,600,000 units of penicillin and one ampule of Combiotic daily. This regime was continued for 14 days. On the 3rd day the W.B.C. was 950 with 100% lymphocytes following which there occurred a gradual and progressive increase so that by the 15th day the W.B.C. was 6,500 with 74% segs, 25% lymphocytes and 1% monocytes. Recovery was uneventful.

In keeping with the policy(5) of considering all fevers of undetermined origin as possible cases of agranulocytosis until proven otherwise (when they occur during the course of phenothiazine therapy), an early diagnosis of agranulocytosis and a favorable result from treatment was possible.

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Complete Clinical history of this case including laboratory data and treatment schedule as well as an abstracted bibliography of the current literature regarding phenothiazine agranulocytosis available upon request. Please direct inquiries to Dr. Paul E. Feldman, Director of Research and Education, Topeka State Hospital, Topeka, Kansas.

EQUITY

I have no special regard for Satan, but I can at least claim that I have no prejudice against him. It may even be that I have been a little in his favor, on account of his not having a fair show. All religions issue Bibles against him, but we never hear his side. We have none but the evidence for the prosecution, and yet we have rendered the verdict. To my mind this is irregular. It is un-English, it is un-American.

Of course, Satan has some kind of a case, it goes without saying. It may be a poor one, but that is nothing; that can be said about any of us. As soon as I can get at the facts I will undertake his rehabilitation myself, if I can find an impolite publisher. It is a thing which we ought to do for anybody who is under a cloud.

We may not pay him reverence, for that would be indiscreet, but we can at least respect his talents. A person who has for untold centuries maintained the imposing position of spiritual head of four-fifths of the human race, and political head of the whole of it, must be granted the possession of executive abilities of the loftiest order. In his large presence the other popes and politicians shrink to midgets for the microscope. I would like to see him. I would rather see him and shake him by the tail than any other member of the European Concert.

—Mark Twain

COMMENT

ON THE OCCASION OF ERWIN STRANSKY'S 80TH BIRTHDAY

Erwin Stransky was born in Vienna on July 3, 1877, and received the degree of Doctor of Medicine from that city's university in 1900. The following year he joined the First Psychiatric Clinic in Vienna under Wagner-Jauregg and worked there as clinical assistant for 7 years. Thereafter he gave up his position but remained in close contact with the clinic as "Alter Herr." In 1906 he was appointed to the permanent position of expert consultant in psychiatry and neurology to the court of law in Vienna. He became "Privat-Dozent" in 1908, was appointed director of a workers' insurance clinic in 1911, and associate professor of psychiatry and neurology at the University of Vienna in 1915. His teacher, Wagner-Jauregg, suggested his appointment to full professorship 4 times, but the political situation in Austria interfered. Stransky was forced into temporary retirement for 7 years. In May, 1945 Stransky was made director of the Municipal Institute for Nervous Diseases, Rosenhügel, because he had reached the age of retirement.

It is difficult to describe Stransky's work completely. It comprised nearly all fields of psychiatry, neurology, medical psychology, psychotherapy and mental hygiene. Stransky published 257 scientific papers among them 13 monographs, some of which were textbooks and articles in handbooks. His first papers were rather of experimental histological and neurological nature. He described several staining methods, published several papers on discontinuous degeneration in peripheral nerves and an original paper on associated nystagmus. Later, his neurological papers dealt with the diseases of the peripheral nerves, particularly neuritis to which his attention had been drawn by his experiences in the military service during World War I. Shortly before World War II, Stransky introduced a new treatment for multiple sclerosis, namely heterohemotherapy (Fremdblutbehandlung) which since has found general recognition. He described his own experiences with this form of treatment in 11 papers.

Stransky first began to concern himself with the problem of schizophrenia, at that time still called dementia praecox, in the paper he wrote on the occasion of his appointment as "Privat-Dozent," and he never disassociated himself from this field of research which was of special interest to him. In this paper he pointed to the disassociation of the thymopsyche from the noopsyche as the essential characteristic of the schizophrenic disorder. He called this disassociation "intrapsychic ataxia," and ably defended his view on the schizophrenic process against such authorities as Bleuler and Kraepelin. It may be mentioned that in 1932 Stransky described the case of a catatonic patient who suffered a fatal accident by an electric current. The patient showed a temporary remission of his psychosis before his death and Stransky saw in this fact an indication for a possible therapy of schizophrenia, thus anticipating electroshock treatment.

Stransky published 6 papers, some of which were monographs, on manic-depressive psychosis and 15 on problems of forensic psychiatry and in these papers introduced the concept of the "initial offense." Throughout his whole scientific life Stransky has been very interested in all problems of mental hygiene, psychotherapy and neurosis, frequently expressing views quite different from those of Freud. Fifty-seven papers, some of them monographs, contain his ideas and experiences in this field. He was the first to publish a textbook on mental health in German and he became an ardent protagonist of this movement in Austria. The inauguration of applied psychopathology is also to his merit.

In 1945, after 7 years of humiliation, Stransky was able to resume his work in and for the public. He did not miss any scientific meeting or convention in the broad field of neurology and psychiatry, attending many conventions abroad, frequently as of-

ficial representative of Austria, whose interests he upheld as a scientist and a dignified human being. Stransky is the only Austrian who is an Honorary Member of The American Psychiatric Association. He is also honorary president of a number of scientific societies in Austria, and honorary or corresponding member of various scientific associations abroad. Despite his advanced age, which can hardly be guessed from his appearance, Stransky is active both scientifically and as a practicing neurologist and psychiatric expert. He enjoys the greatest admiration and esteem of the physicians of his homeland because of his witty and spirited lectures and quick repartee.

H. Reisner,
Vienna.

CHEMICAL CONCEPTS OF PSYCHOSIS

At the International Congress of Psychiatry in Zurich, Sept. 1957, a symposium, with Dr. Max Rinkel of the Mass. Mental Health Center as chairman, was held on "Chemical Concepts of Psychosis." A distinguished group representing many nations and scientific fields including biochemistry, physiology, pharmacology, psychology and psychiatry discussed the topic. The papers and discussion brought forth many new and critical observations on the progress of investigations on the psychological effects of newer chemicals. A highlight of the program was a message from Dr. Carl G. Jung, Honorary President of the symposium, which reads as follows:

"Please convey my sincerest thanks to the opening session of your Society. I consider it a great honour to be nominated as Honorary President, although my approach to the chemical solution of problems presented by cases of schizophrenia is not the same as yours, since I envisage schizophrenia from the psychological point of view. But it was just my psychological approach that had led me to the hypothesis of a chemical factor, without which I would not be able to explain certain pathognomonic details in its symptomatology. I arrived at the chemical hypothesis by a process of psychological elimination rather than by specifically chemical research. It is therefore with my greatest interest, that I welcome your chemical attempts. To make myself clear, I consider the aetiology of schizophrenia to be a dual one, namely, up to a certain extent, psychology is indispensable to explain the nature and the causes of the initial emotions, which give rise to metabolic alterations. These emotions seem to be accompanied by chemical processes causing specific temporary or chronical disturbances or destructions."

All the members agreed that the meeting had been highly successful, assuring further marked progress in this field of experimental psychiatry.

Max Rinkel, M. D.,
Mass. Mental Health Center.

THE SECOND INTERNATIONAL CONGRESS OF PSYCHIATRY

Zurich, September 1-7, 1957

The sense and the aim of any congress is to *congredere,* that means to get together. This sense and this aim were splendidly realized in Zurich. In a truly cosmopolitan city there are many preconditions making the sojourn of visitors pleasant. I need only to refer to the multilinguality of the Swiss that makes it easy for everybody to enjoy their hospitality, and particularly, in a place like Zurich to fall into the rhythm of a beautiful city.

Our Swiss hosts would have been willing to transcend themselves in order to do justice to their guests if such transcendence would have been necessary outside of one or the other scientific discourse. They had prepared a programm and other printed material—quite a bit of it, indeed, including a psychiatric issue of the *Journal Suisse de Medecine*—that facilitated orientation in time and space as far as possible. There were numerous big and small classrooms in

the University of Zurich and in the Federal Institute of Technology. There were guides and helpers everywhere and there was even plenty of parking space provided.

Heart and soul of the organization of the congress were Manfred Bleuler and his staff. Manfred Bleuler was, I daresay, the soul of the whole, although he had to move around on a cast due to a malleolar fracture that he had suffered recently. He crowned his work with the speech he gave after the Congress Dinner on Wednesday, September 4. In this speech the topic was not psychiatry but Zurich and its history. Manfred Bleuler put his whole heart into it showing his dedication to his task and his profound love for his home city.

In the scientific programm the biological and the philosophical (geisteswissenschaftliche) approach in psychiatry came to rather full expression. As regards treatment, somatic methods as well as psychotherapy had field days. Special and ethnological problems were presented too. "The Present Status of our Knowledge about the Group of Schizophrenias" was demonstrated in papers and in symposia. There were not any new discoveries revealed. There were also several exhibits but I will not go into detail.

Congress languages for the about 2500 participants coming from 57 countries were German, French, English, Spanish and Italian. It repeatedly happened that a speaker had to read his paper two or three times, everytime in another language. Manfred Bleuler, for instance, read his paper, "Aims and Topics of our Congress," on Sunday in the forenoon in French, in the afternoon in English, and on Friday morning in German.

There were almost exclusively prepared discussions, mostly read from a script by the discussants. This, in my opinion, is regrettable as it impeded spontaneous remarks. The time factor may have played a role here. However, if before the definite formulation of the programm a goodly number of superfluous papers would have been eliminated, time enough would have been available. It occurs to me also that an International Congress should not be the exercising ground for inexperienced and boring speakers. Some criticism and selfcriticism in these respects would be very desirable.

At the meetings on Sunday the Zurich Chamber Orchestra made lovely music. Twice in the evening a serenade was performed by the Winterthur String Quartetté. A memorial plaque to Adolf Meyer was donated to the University Psychiatric Clinic Burghoelzli.

On Sunday afternoon the French psychiatrists Jean Delay and Henri Ey and our own Oskar Diethelm were appointed honorary doctors of medicine by the Medical Faculty of the University of Zurich.

Needless to say the work of Eugen Bleuler found full appreciation at a great number of opportunities.

Erwin H. Ackerknecht published a timely *Short History of Psychiatry* * from which I translate:

> The great men (sc. in history) were only possible because other men worked with and before them. If there had not been a Pinel, a Kraepelin, or a Freud, other men would have accomplished their work with more or less splendor. This does not exclude the fact that these great men are the best representatives of the psychiatry of their time; hence they must be more intensively studied than is possible in a short survey.

Let us hope and pray that another Pinel or another Kraepelin or another Freud may be given to psychiatry before long.

EUGEN KAHN, M. D.,
Houston, Tex.

* *Kurze Geschichte der Psychiatrie.* Stuttgart: Ferdinand Enke. 1957, IX, 99 pp.

Mon métier et mon art, c'est vivre

—MONTAIGNE

OFFICIAL NOTICES

TREATMENT OF ACUTE EMOTIONAL DISORDERS UNDER THE DEPENDENTS' MEDICAL CARE PROGRAM FOR DEPENDENTS OF MEMBERS OF THE UNIFORMED SERVICES

Since medical care of dependents of uniformed services personnel in civilian medical facilities began December 7, 1956, as authorized by Public Law 569, 84th Congress, it has been noted that the authorization for hospitalization of acute emergencies classified as acute emotional disorders needs to be better understood.

Treatment of nervous and mental disorders is not authorized under the provisions of the Dependents' Medical Care Act, Public Law 569, 84th Congress, except in special and unusual cases (see Sec. 103(g)(2) and Sec. 204).

The authority given to make exceptions for hospitalization of patients for nervous and mental disorders in uniformed services medical facilities requires some explanation. The Surgeon General of the respective uniformed service is authorized to treat dependents with acute emotional disorders in uniformed services facilities and to transfer eligible dependents from civilian to uniformed services facilities for treatment of such disorders. However, few beds are available for women and children in uniformed services facilities for the treatment of nervous and mental disorders. In general, they are sufficient only for female uniformed service members and for dependents having N-P disorders who are evacuated from outside continental United States.

The need to provide civilian facilities for cases of acute emergency, including acute emotional disorders was met by the Joint Directive; "Hospitalization is authorized at Government expense for such emergencies only pending completion of arrangements for care elsewhere" unless the illness qualifies for hospitalization under another provision of the law, such as pregnancy. This is interpreted to mean that the Government is liable for payment of the hospital and physician's bills only: a. until the acute emotional disturbance subsides; or b. until the sponsor can arrange for care at other than Government expense, whichever is earlier.

The judgment and integrity of the attending physician must be relied upon to determine when the acute emotional disturbance subsides, also the probable duration of hospitalization required, and his word will be unquestioned, unless there is evidence to the contrary.

For a practical working arrangement, Fiscal Administrators may handle many cases without referral to the Office for Dependents' Medical Care. Bills may be paid without further reference: a. if the physician states the condition was one of acute emotional disorder constituting an emergency requiring hospitalization for the life, health or well being of the patient, regardless of psychiatric diagnosis; and b. if the duration of hospitalization did not exceed 21 days.

When the Government's liability terminates not later than 21 days, the DA Form 1863 for the physician and hospital should show the type of disposition which has been made. This will aid contractors in making prompt payments.

Extension of medical care beyond 21 days at Government expense may be granted only by the Contracting Officer, Office for Dependent's Medical Care for short periods, for the following reasons:

(1) When there is necessity for more time for the sponsor to assume responsibility. Examples: (a) Sponsor's return from overseas station, sea duty, etc.; (b) Difficulty in obtaining agreement of state or municipal institution to accept patient.

(2) When retention in the hospital for two or three weeks will result in a cure or remission which will permit patient to return home.

(3) When diagnosis for determination of length of care cannot be made within the 21-day period.

A suggested procedure for requesting an extension of hospitalization beyond 21 days follows:

(1) Upon admission of a patient under the Dependents' Medical Care Program, the hospital administrator should immediately contact the charge physician to ascertain the length of time hospitalization will be required for the acute emergency.

(2) If the attending physician is of the opinion that hospitalization will be required beyond a 21-day period, the hospital administrator should immediately prepare a report containing information specified in subparagraph (3) below and forward to the Contractor (Blue Cross or Mutual of Omaha, whichever is applicable). Because of the shortness of time, this report should always be submitted by the end of the first 7 days of hospitalization and should be forwarded by air mail by all echelons, if more expeditious.

(3) The report will be clinical and will show the name of the dependent, date of admission, diagnosis, prognosis, service member's name, serial number, branch of service, the physician's name, and the length of time for which extension of hospitalization at Government expense is requested with reasons therefor.

In cases when extensions of time beyond 21 days are granted by the Contracting Officer, the DA Forms 1863 submitted by the hospital and physician must have attached thereto a copy of the Contracting Officer's authorization.

Procrastination and delay on the part of an available sponsor to arrange for care of the patient at other than Government expense will in no case be considered reason for extension of the 21-day period.

On receipt of request for extension of medical care beyond 21 days, the Contracting Officer will determine if facilities are available for further care in uniformed services facilities and if so, will notify the contractor. If an extension of time is not justified or uniformed services facilities are not available, the Contracting Officer will notify the contractor of the date when the Government's liability for payment did or will terminate.

Physicians accepting patients with acute emotional disorders under the Dependents' Medical Care Program have the great responsibility of making recommendations which are compatible with the Law governing the Program. They must determine that the acute emotional disorder is one which constitutes an acute emergency and that hospitalization is necessary for the life, health or well being of the patient. They should institute treatment as indicated and at the same time begin discussions with the sponsor which will lead to the proper treatment and care of the patient at other than Government expense.

PAUL J. ROBINSON,
Major General, M. C.
Executive Director,
Office for Dependent's
Medical Care.

HAPPINESS

Happiness in this world, when it comes, comes incidentally. Make it the object of pursuit and it leads us a wild-goose chase, and is never attained. Follow some other object, and very possibly we may find that we have caught happiness without dreaming of it; but likely enough it is gone the moment we say to ourselves, "Here it is!" like the chest of gold the treasure-seekers find.

—NATHANIEL HAWTHORNE

NEWS AND NOTES

PSYCHOPHARMACOLOGY SERVICE CENTER, N.I.M.H.—A clearinghouse of information on psychopharmacology is being established by the Psychopharmacology Service Center of the National Institute of Mental Health. An extensive collection of the literature in this field, including pharmacological, clinical, behavioral, and experimental studies of the ataraxic, psychotomimetic, and other centrally acting drugs, will be classified and coded to enable the staff to answer a wide variety of technical and scientific questions. As soon as enough materials have been assembled the Center plans to offer bibliographic and reference service as well as the preparation of critical and analytic reviews of special topics in the field.

In order to accelerate the growth of the literature collection the Center invites persons working in this field to provide 3 copies of any papers that deal with their work—whether reprints, pre-publication manuscripts, progress reports, informal mimeographed reports, papers read at meetings, or abstracts. Letters outlining work in progress would also be welcome. Any restrictions that authors may wish to place on the Center's use of their papers will be strictly observed. All materials should be addressed to the Technical Information Unit, Psychopharmacology Service Center, National Institute of Mental Health, 8719 Colesville Road, Silver Spring, Md.

WESTERN DIVISIONAL MEETING, A.P.A.—The 4-day meeting of the Western Division of The American Psychiatric Association, in conjunction with the West Coast Psychoanalytic Societies, will be held in Los Angeles, Cal., November 20-24, 1957. More than 2,000 physicians from the Western United States and Canada are expected to attend.

Papers to be presented will be grouped in the following categories: Group Psychotherapy, Experimental Psychiatry, Psychosomatic Medicine, Hospitals, Drugs, Individual Psychotherapy, Social Psychiatry, Child Psychiatry, and Psychoanalytic Papers.

Delivering the Academic Lecture, November 23, will be Ralph W. Gerard, M. D., Ph. D., Professor of Neurophysiology at the University of Michigan School of Medicine. Other guest speakers: Franz Alexander, M. D., Los Angeles; Sydney Margolin, M. D. and René Spitz, M. D., Denver, and author Aldous Huxley.

For further information contact Robert A. Solow, M. D., 427 North Camden Drive, Beverly Hills, Cal.

FINANCIAL AID TO MENTAL HEALTH STUDENTS.—The staff of the Southern Regional Education Board has compiled a brochure listing grants, fellowships, stipends and scholarships available in the South for training in the mental health professions: psychiatric social work, psychatric nursing, psychiatry and clinical psychology. The material was secured from institutions and agencies in the 16 states included in the Southern Regional Education Compact. It lists 1,042 such grants amounting to $2,653,700 per year in all the disciplines.

Copies of the brochure may be obtained on request from: Southern Regional Education Board, 881 Peachtree St., N.E., Atlanta 9, Ga.

AMERICAN OCCUPATIONAL THERAPY ASSOCIATION.—The Association celebrated its 40th anniversary with the Annual National Institute Conference held October 21-25 in Cleveland, Ohio. Occupational therapists from all over the United States participated in the program.

Emphasis was placed on group techniques and the occupational therapist's role in the therapeutic situation. A panel, consisting of representatives from several allied profes-

sions, as well as occupational therapy, discussed the evaluation of the patient.

The opening address was given by Henrietta McNary, O.T.R., Director of Occupational Therapy, Milwaukee-Downer College. Louis Seltzer, Editor of the Cleveland Press, was speaker at the banquet.

5TH INTERNATIONAL CONGRESS OF INTERNAL MEDICINE.—The 5th Congress of the International Society of Internal Medicine will be held in Philadelphia, April 23-26, 1958. Those physicians in North and South America who wish to become members of the International Society and to attend the Congress should request application forms from E. R. Loveland, Secretary-general of the 5th Congress, 4220 Pine St., Philadelphia 4, Pa. Dues are $5.00 for a 2-year period. Physicians in other countries should write to Professor H. Ludwig, 2, Med. Aberlung Burguspital, Basel, Switzerland.

Anyone who wishes to participate in the program should send the title of his paper and a 200 word abstract, in triplicate, to Dr. Frank N. Allan, 605 Commonwealth Ave., Boston 15, Mass.

AMERICAN PUBLIC HEALTH ASSOCIATION, INC.—The Association is initiating a long-range technical development program to provide leadership and guidance to governmental and voluntary agencies, in the health problems of the nuclear age. "In some important areas of public health," states Dr. Reginald M. Atwater, executive secretary, "methods and standards have remained virtually unchanged since the horse-and-buggy era."

Initial concentration will be in 8 areas: radiological health, accident prevention, mental health, chronic disease and rehabilitation, child heaith, environmental health, medical care administration and public health administration.

To coordinate the program, a technical development board has been appointed. Chairman is Dr. Martha M. Eliot, former chief of the U.S. Children's Bureau and now professor of maternal and child health at the Harvard School of Public Health, Boston.

The present program is the first step in a 3-year expansion and reorganization program for the 85-year-old professional society. The Rockefeller Foundation has made a grant of $150,000 to help finance the new activities.

Among listed priority health needs is the maintaining of a full attack on the major unsolved health problems: cardiovascular diseases, mental diseases, crippling and handicapping conditions, cancer, dental diseases, diabetes and alcoholism.

The American Public Health Association is the largest professional organization of public health workers in the Western Hemisphere, its 13,000 members including physicians, nurses, dentists, veterinarians, engineers, sanitarians, statisticians, nutritionists, biologists, health educators, institutional administrators and other specialists on staffs of governmental and voluntary agencies.

Headquarters of the Association: 1790 Broadway, New York City.

President: Dr. John W. Knutson, assistant surgeon general and chief dental officer, U.S. Public Health Service.

BIBLIOGRAPHY OF MEDICAL REVIEWS, VOL. 2.—Thirteen months after the publication of the experimental Bibliography of Medical Reviews, 1955, volume 2 appeared in August. The Bibliography will be continued as a regular annual publication of the National Library of Medicine.

Complete entries including the bibliographic reference and translation of foreign titles, appear under the various subject headings, with plentiful cross references. This issue contains about 1800 review articles, all material being culled from journals indexed in the Current List of Medical Literature.

Copies are available from the Superintendent of Documents, Government Printing Office, Washington 25, D.C., at 60¢ per copy.

DR. WARNER HEADS CRAIG COLONY.—Dr. George L. Warner, assistant director of Marcy (New York) State Hospital, has been appointed director of Craig Colony, state hospital for epileptics in Sonyea, N.Y., and assumed his new duties September 26, 1957. He succeeds Dr. William C. Johnston, who

has returned to his former post in the Department of Correction.

Dr. Warner has been at Marcy State Hospital for the past 14 years, and with the Department of Mental Hygiene 34 years. He is a diplomate of the American Board of Psychiatry and currently president of the Mohawk Valley Neuropsychiatric Society.

NATIONAL FOUNDATION FOR INFANTILE PARALYSIS.—One of the newly announced grants by the National Foundation will be for research in vaccines to protect the human nervous system against invasion by viruses. Dr. Jonas E. Salk will direct this research at the University of Pittsburgh.

Under another of the grants, the Rockefeller Institute for Medical Research will continue their investigations of drugs for the treatment or prevention of polio crippling.

Studies of possible live-virus vaccines will go on at Yale University under another grant. After preliminary injections of Salk vaccine, the subjects will receive weakened strains of virus by mouth—so-called live-virus vaccines.

TREATMENT OF JUVENILE DELINQUENTS, CALIFORNIA.—Recently the State of California has authorized the establishment of a special treatment program for juvenile delinquents with psychiatric problems who are in need of longterm treatment. Special units whose efforts will be devoted entirely to treatment are now being organized within one correctional school for boys and one for girls. Each treatment unit will consist of a psychiatrist as director, plus the necessary number of clinical psychologists, case and group workers, who will make maximum use of all modern treatment methods. It is estimated that these special problem cases constitute approximately 15% of all youths admitted to Youth Authority institutions.

DES MOINES CHILD GUIDANCE CENTER.—The Center will inaugurate a "Day-Hospital" project under a grant from the National Institute of Mental Health. Aim of the project is three-fold: 1. To provide an intensive therapeutic program to reduce some of the psychological and economic difficulties involved in hospitalization. 2. To make possible intensive diagnostic study and treatment for children with mixed disorders (*e.g.* physical handicap and neurotic disorder). 3. To evaluate systematically the relative effectiveness of day-hospital and outpatient care for children.

A new building for both day-hospital and outpatient services will be erected adjoining Raymond Blank Memorial Hospital, a teaching hospital in pediatrics.

A brief description of the project is available by writing to: Howard V. Turner, M. D., Medical Director, Des Moines Child Guidance Center, Des Moines 9, Iowa.

CEREBRAL VASCULAR DISEASE AND STROKES.—This is the title of a new illustrated publication on disease of blood vessels of the brain, just released by the Public Health Service (Publication no. 513). The booklet shows the 5 important ways in which vessel diseases impair the working of the brain and outlines steps involved in treatment and rehabilitation.

A free copy may be obtained from the Heart Information Center, National Heart Institute, Bethesda 14, Md.

STUDY CENTER FOR MENTALLY RETARDED CHILDREN, BUFFALO, N.Y.—A grant of $45,000 to establish the Buffalo Diagnostic and Counselling Study Center for Mentally Retarded Children was announced by Raymond W. Houston, chairman of the New York State Interdepartmental Health Resources Board. The Center will be an integral part of the Rehabilitation Center of the Children's Hospital and Crippled Children's Guild at 936 Delaware Avenue, Buffalo, N.Y.

Complete evaluation, diagnosis and treatment will be offered to mentally retarded children. Parent counselling and guidance in planning a definite program for the child will be a major goal. Other features of the program are teaching medical students, nurses, psychologists and social workers modern techniques of treatment, evaluation and diagnosis of mental retardation.

Dr. Robert Warner, Director and Coordinator of the Rehabilitation Center, will direct the new Study Center.

Social Work Grants, University of Denver, Colo.—Federal grants amounting to $69,687 have been allocated to the University of Denver School of Social Work, 1957-58 term. The grants will be used to maintain an expanded program for the education of psychiatric social workers, and to prepare social workers for state vocational rehabilitation programs, hospitals, clinics, adjustment centers for the blind and crippled children's services.

American Public Health Association Annual Meeting.—At the 85th annual meeting to be held in Cleveland, Ohio, November 11-15, 1957, there will be ample representation of all the problems of mental health. Most of the papers to be presented on this subject emphasize community mental health problems, and the need to educate the public to the problems of the mentally ill. Some of the topics listed are "Intramural Psychiatry in Public Schools," "Health Department Participation in a Developing Community Mental Health Program," and "Mental Health Aspects of Environmental Resources and Complexes." Dr. Rema Lapouse, associate in psychiatry and preventive medicine and public health at the University of Buffalo, and secretary of the mental health section of the American Public Health Association, counts on a wide response on the part of psychiatrists and associated workers in the field of mental health, to the 5-day program.

World Medical Periodicals.—The 2nd edition of *World Medical Periodicals* published by The World Medical Association, became available in October, 1957. The first edition, published by UNESCO and WHO, appeared in 1953. As a result of continued revision during the past 2 years, some 1,400 new titles have been added and 600 omitted. The new edition contains the titles of medical, pharmaceutical, dental and medical veterinary periodicals in existence at the beginning of 1957, and also a few well known periodicals which have ceased publication since 1900 but to which reference is frequently made in current medical bibliographies.

The new appendices give: 1. a list of the principal international abstracting journals and 2. a list of the main international periodical indexes.

Other new features include the International Code for the abbreviation of titles of periodicals as issued in 1954, and the making of the index of periodicals by subject more useful in grouping the index numbers by countries.

One objective of the publication, *World Medical Periodicals* is to provide medical editors and publishers with abbreviations of the periodicals listed which had been determined by an accepted medical code, thereby securing uniformity in one particular detail of medical bibliography.

The editorial office: *British Medical Journal*, BMA House, Tavistock Square, W.C.1, London, England.

WHICH ACADEMIC CAREER?

. . . philosophical activity as a *business* is not normal for most men, and not for me. To be responsible for a complete conception of things is beyond my strength. To make the *form* of all possible thought the prevailing *matter* of one's thought breeds hypochondria. . . . But as my strongest moral and intellectual craving is for some stable reality to lean upon, and as a professed philosopher pledges himself publicly never to have done with doubts on these subjects, but every day to be ready to criticize afresh and call in question the grounds of his faith of the day before, I fear the constant sense of instability generated by this attitude would be more than the voluntary faith I can keep going is sufficient to neutralize. . . . A 'philosopher' has publicly renounced the privilege of trusting *blindly*, which every simple man owns as a right—and my sight is not clear enough for such constant duty. Of course one may say, you could make of psychology proper just such a basis, but not so, you can't divorce psychology from introspection, and insecure as is the work demanded by its purely objective part, yet it is the other part rather for which a professor thereof is expected to make himself publicly responsible.

—William James
(*Diary*, aet. c.30)

BOOK REVIEWS

PSYCHICAL RESEARCH. By *R. C. Johnson.* (New York: Philosophical Library, Inc., 1956. pp. 176, $2.75.)

The review of a book on psychical research in a psychiatric journal implies that this "subject" has some relevance to psychiatry. The question is: Does it? The basis for our answer should be carefully weighed. According to the proponents of parapsychology, their work has relevance not only to psychiatry, but to most other scientific and practical endeavors as well. This reviewer, however, is of the opinion that writings on parapsychology are compounded of various manifestations of the all-too-human inability to tolerate object loss with a profound epistemological confusion concerning inquiry, language and science. This book only confirms the reviewer's foregoing position toward psychical research. Still, there is a persistent interest among psychiatrists in this subject, and an equally persistent claim for the psychotherapeutic relevance of telepathy in various quarters. These "social facts" amply justify critical evaluation of such material.

The contents of the book can be best described by listing the titles of the 10 chapters: "I. History of Psychical Research, II. Telepathy and Clairvoyance, III. Precognition and Retrocognition, IV. Object-reading or Psychometry, V. Psycho-kinesis and Poltergeist Phenomena, VI. Materialisation Phenomena, VII. Apparitions and Hauntings, VIII. Mediumship, IX. The Problem of Survival, X. The Importance of Psychical Research." No new raw observations, or "data," are provided. The author's ideas are based on the writings of others and his own thinking about these problems. A few illustrative passages will be quoted, since the "atmosphere" of the book and its author's thinking can probably be best conveyed in this fashion.

"It is almost ironical that the labours of psychical research have enlarged our knowledge of the mind's powers, and by implication made the essential dependence of mind on matter seem less and less plausible" (p. 158).

"My own considered view is this: that responsible individuals with caution and persistence can, and have, satisfied themselves of the survival by intimate friends of the death of the body. I confess that this is my own conviction in relation to an intimate friend of mine who died some ten years ago. I consider, however, that this kind of conviction is personal and cannot be handed on to others. When, however, we look at the issue of survival objectively, the cumulative evidence strongly supports the survival hypothesis as by far the most plausible" (p. 159).

"If, as I believe, the so-called material world is a creation of Mind (with the aetheric world an intermediate creative stage), then it is on the level of Mind that the prototype of the material level exists. When a man no longer retains awareness of the material level, whether in sleep by a temporary inward withdrawal of consciousness, or whether by discarding his body at death, consciousness is refocused on an interior level, *i.e.*, one which is a step nearer to the ultimately real. This new world-level then acquires objectivity for him" (p. 161).

"It will be clear that the zone or level between the mental and the material, which in this book we have labelled aetheric, must be one of great importance to physical health" (p. 168).

The author concludes with the following paragraphs:

"Today, most if not all of the miracles can be accepted as credible in the light of the phenomena considered in this book. Powers of the mind which we have come across already, if fully under the control of the will, would be capable of performing these miracles. Our concept of the term "miracle" would then be of an unusual physical event, inexplicable on the basis of current laws of the physical world, but wholly "natural" as an exercise of the powers and energies of the mental level. I can see no reason why Religion should not view Psychical Research as a friendly fellow-traveller in the search for Truth. Psychical Research is primarily a search for Truth by the well-established scientific method of experiment and by the traditional method of analysis of testimony common to such disciplines as law and history. Its field extends between the familiar material world we know through our senses and the so-called subjective world of Mind. Behind the levels of Mind are unplumbed depths of being which take us nearer to the ultimately Real. But this is the territory—awesome, fascinating, rapturous, and infinitely more important—of the Mystics" (p. 173).

The author, like many parapsychologists, raises the question of survival after death. Belief in this, setting aside its psychological determinants, is based on, and illustrates, a rather primitive sort of error in reasoning. This reasoning—in the reviewer's opinion—runs something like this. "I" can lose my arm or leg, or even my eye, and still "I" remain. In other words, one can lose parts of one's body, and still feel that one's sense of identity has remained unchanged. Accordingly, the reasoning seems to be: If I can lose this or that part of my body and still retain my (sense of) identity, why should it not be possible to loose my entire body, and still retain my "self?" Indeed, belief in the verity of this outcome has probably played an important part in the seeking of joyful death by religious martyrs. For such a person, death is not "death," but a voyage to Paradise. No doubt, man's ability to tolerate, and to accept, object loss, including the loss of one's own body and self, is frequently limited. And the struggle for its mastery gives rise to all sorts of human activities, some more, some less *useful;* the word

"useful" here refers to something more than merely the restoration of the lost sense of well being. Human activities having some pertinence to this problem thus encompass, among others, science, religion, fiction and paranoid pseudo-science. This book, and many others dealing with "psychical research," may be regarded, therefore, as posing an interesting—and perhaps for some people, an important—challenge in distinguishing between good science, bad science, science fiction and paranoid system building. It behooves authors, publishers and the intelligent reading public alike to consider what material falls in which category and to know the reasons for their choice.

THOMAS S. SZASZ, M. D.
Syracuse, N. Y.

MENTAL HYGIENE (Revised Edition). By *D. B. Klein.* (New York: Henry Holt & Co., 654 pp., 1956. $6.75.)

This revised edition, including 654 pages, is aimed at enlightening the general public, and to create a climate of awareness of its mental health needs. It contains a glossary of terms, and a complete index. Bibliographic references appear as footnotes.

The book is divided into 4 parts. The first is an introduction embracing comments upon the nature and scope of mental hygiene. The author calls attention, as others have, to the fact that mental hygiene or mental health enters into every phase of human activity. It constitutes a problem, therefore, not only as a challenge to modern medicine and its auxiliary disciplines, but also to the legal and educational professions; to legislators and statesmen; to the sociologist and the industrialist; to the psychologist and the clergy; and to community and civic leadership concerned with the development of an enlightened and articulate public opinion on this subject matter. Part I also briefly reviews the history of the so-called "mental hygiene movement" and some of the problems with which mental hygiene is concerned.

Part II reviews the status of knowledge concerning the nature of mental disorders and the understanding of abnormal behavior; separating and discussing, on the one hand, those disorders associated with structural brain changes, or situations that interfere with brain cell nutrition; and those on the other hand that have long been designated as functional in origin.

Part III is concerned with the subject of prevention, of prophylaxis, or situation that hinders the development of psychiatric disorders. This particular situation is approached by reference to the numbers and percentages in each diagnostic category of patients admitted to state and private mental hospitals. The author is not too optimistic respecting the prevention of those disorders associated with organic or structural brain changes, nor is he cheerful about preventing those of a functional nature in the light of the present state of knowledge. He deplores the paucity of available funds for the support of concerted research in the mental health fields, but envisages the day, when such research becomes effective, that mental hygienists will be able to substitute "the certainty of touch that comes with the accumulaion of tested knowledge." "Without a solid foundation of such tested knowledge the prophylactic campaigns of the mental hygienist will continue to be more of a tribute to his earnest hopes than a record of positive accomplishment."

However, the book gives very little space to a consideration of the role which the formulation or modification in public policies toward the mentally ill, and their administration, may play in the prevention of such illness; particularly with reference to their early detection and the application of measures for their treatment or amelioration. Perhaps, in the light of the present knowledge, this latter approach may be, for the time being, the foundation upon which the superstructure for the prevention of mental illness must be built. The author concedes that progress has been made, for an insight into the nature of these problems and an appreciation of their complexity is more profound than that of the "alienists" of earlier generations. Considering how little money society has devoted to research, those responsible for what progress has been made are all the more deserving of gratitude.

Part IV deals with the promotion of positive mental health. This is approached from the standpoint of personality growth and development and its emancipation. The author asserts that the development of the positive aspects of good mental health is intimately related with emotional security having its roots in the life of home and family. He recognizes the fact that the personality of each and every person is the result of what the world and its people have done to him today, yesterday, and the days before. He does not rigidly adhere to the doctrine that personality development is exclusively determined by parent-child relationship and permanently fixed by experiences of early infancy and pre-school years. He recognizes, therefore, that the education and socialization of children is not limited to the home or early developmental years, and that there is not always but one right way to rear children.

Borrowing from Havighurst, the author discusses personality development for promoting positive mental health from the standpoint of goals to be sought: such, for example, as (a) patterns of behavior respecting dependence and independence; (b) to give and receive affection; (c) to deal with different social groups; (d) to assimilate and acquire a moral code and an ethical sensitivity; (e) to acquire appropriate attitudes toward sex roles and toward masculinity and femininity; (f) to accept characteristics of physical growth and development; (g) to develop increasing effectiveness in muscular skills; (h) to accept and become increasingly familiar with the physical world; (i) to acquire increasingly effective modes of communication, accurate concepts and reasoning skills; and (j) to feel at home in the universe.

The author comments upon the dangers of over dependence of psychology and upon conflicting teachings and the perspectives of parents and teachers. He also discusses in the section devoted to the development of a balanced personality the dynamics

of conscience; the role of home fixation to functional autonomy; the coping with reality; and the Utopian aspects of a program for promoting the positive aspects of mental health. He believes that repression is an important factor in personality integration, and comments, "Life being what it is, repression of some sort is not only necessary but inevitable."

The book closes with a comment on the significance of religious teaching and the role which the so-called "old fashioned virtues" may play in promoting positive mental health.

On the whole this book is a praiseworthy contribution and should fulfill a need for which it was written.

W. L. T.

EPILEPSY AND THE LAW: A PROPOSAL FOR LEGAL REFORM IN THE LIGHT OF MEDICAL PROGRESS. By *Roscoe L. Barrow,* and *Howard D. Fabing.* (New York: Hoeber-Harper, 1956. $5.50.)

With the recent publication of *Epilepsy and the Law* a tremendous step has been taken toward correcting the many archaic laws that have contributed to the stigma associated with epilepsy. Epilepsy laws have lagged far behind medical progress in understanding epileptic phenomena and controlling the symptoms. The special committee on legislation of the American League Against Epilepsy, aided by a grant from the National Institute of Neurological Diseases and Blindness, sponsored a survey of laws and administrative practices affecting epileptics. Dean Roscoe L. Barrow, University of Cincinnati School of Law, and Dr. Howard D. Fabing have collaborated in a scholarly and exhaustive review of the laws of the 48 states with respect to marriage, driver's licenses and employment of epileptics. They show that the existing laws were enacted at a time when even the medical view held that the etiology of seizures was unknown, seizures were incurable, the condition was accompanied by progressive mental deterioration and progeny of epileptics was likely to have seizures. Many states (13 at the present time) have laws making marriage of persons with epilepsy a crime, making their sterilization mandatory or permissible, and which bracket epilepsy with insanity, and mental retardation as sufficient cause for custodial care. Wisconsin has recently initiated legislative reforms by repealing laws of sterilization of epileptics, of marriage prohibition, of compulsory reporting and is revising its policy on driver's license. Revision of workmen's compensation laws remains to be enacted. The report is well indexed so that each state's position in respect to the various laws may be quickly found. Pointing out problems does not automatically correct them. Included, therefore, is a blueprint for modernization of legislation which discriminates against epileptics.

ELIZABETH G. FRENCH, M. D.,
Boston, Mass.

J.A.M.A. CLINICAL ABSTRACTS OF DIAGNOSIS AND TREATMENT. American Medical Association. (New York: Grune & Stratton, Inc., 1956, pp. 661. $5.50.)

This volume presents a large number of abstracts emphasizing diagnosis and treatment selected from the "Medical Literature Abstracts" section of the J.A.M.A. One naturally compares it with other abstract annuals and finds its coverage much broader——replacing several volumes. As well as covering the 10 body systems there are chapters on eye, ear, nose and throat, metabolism, poisonings, infections, therapeutics, and diagnostic techniques. This reviewer feels some brief editorial comments by experts in the various fields would be a valuable addition.

The volume should be of value to the general practitioner, or the specialist with broad interests; (a) if he had been negligent of the literature but took time for this quick method of review for 1955, or; (b) wished to look up recent articles on some particular subject. One could locate almost any subject in the index and, depending on the amount of recent progress, find one or more abstracts reviewing current experience and thought.

W. T. W. CLARKE, M. D.,
Toronto, Canada.

CLINICAL EXAMINATIONS IN NEUROLOGY. By *James A. Bastron and others.* Sections of Neurology, and Section of Physiology, Mayo Clinic. and Mayo Foundation. (Philadelphia: W. B. Saunders Co., 1956. $7.50.)

This text is an excellent example of the recording of the techniques in examination of the nervous system, selected by a number of neurologists over more than the past 50 years. These men have had the opportunity of working as a "guild" and thus contended, with a minimum of competition, to divert the truly scientific interest in acquiring the most efficient techniques for their performance of a neurological examination.

There is nothing revolutionary in the presentation, but it is noteworthy that the treatment of each chapter is extremely thorough. The neurological history is covered in 2 chapters, and the latter sets out the use of the Mayo Clinic neurological charts used for recording.

A chapter is devoted to neuro-opthalmology in which the cranial nerves associated with eye and pupillary movements are considered, as well as the optic nerve. Motor function is given 2 chapters. The latter describes the specific study of muscle.

In treating the examination of mental function, it is refreshing to find a neurological text that does not involve itself with a psuedo-psychiatric examination, and present this as a neurologist's assessment of mental function. The chapter on clinical examination in selected problems of pain is a novel treatment and is extremely practical.

The members of the section of psychology have contributed 2 excellent chapters—one on electroencephalography, and the other on electro-myography. Sufficient basic science is included to ex-

plain the nature of the modalities measured and the responses to be expected in the various more common neurological diseases.

Chapter 16 provides a well systematized reference for pharmacological and biochemical aids in the neurologic diagnosis of altered states of consciousness (including convulsive disorders), headache, muscular weakness, pollyneuropathy, Wilson's disease and diabetes insipidus. The final chapter on spinal fluid examination by lumbar and cisternal puncture completes this comprehensive text.

This volume should be of great value to the student and no doubt, will be prized in any neurologist's library. It is indeed fitting that a work of this calibre was inspired by 2 of our outstanding pioneers in American Neurology, namely, Henry W. Woltman and Frederick P. Moersh.

Lorne D. Proctor, M. D.,
Henry Ford Hospital.

Atlas of Neuropathology. By *Nathan Malamud, M. D.* (San Francisco: University of California Press, 1957, pp. 468, $20.00.)

The photography of both the gross and the microscopical specimens illustrated in this comprehensive atlas is excellent. It is of interest that, apart from two pages of colour photo-micrographs, the author has found black and white photography to be adequate throughout.

The atlas illustrates and describes nine types of disorders, after a preliminary chapter on Cytology and Cellular Pathology, under the titles of inflammatory, toxic and nutritional, demyelinating, vascular, traumatic, degenerative, neoplastic, developmental and a final important chapter on Sequelae of Paranatal and Postnatal Disorders. The chapter sub-headings combined with a good index make the book easy to use.

It will prove a valuable reference work on the shelves of general and special medical libraries, and it should be available in all laboratories in which undergraduate and graduate neuropathology is taught.

Eric A. Linell, M. D.,
University of Toronto.

The Year Book of Neurology, Psychiatry and Neurosurgery 1956-1957 Series. Edited by *Roland P. Mackay, M. D.* (Neurology), *S. Bernard Wortis, M. D.* (Psychiatry), *Oscar Sugar, M. D.* (Neurosurgery). (Chicago: The Year Book Publishers, 1957. $7.00.)

With its 56th year of publication this Review records another change in its editorial staff. Ten years ago a section on neurosurgery was introduced in the Year Book under the editorship of Percival Bailey. This year Oscar Sugar, who for the past 3 years and more shared editorial duties with Dr. Bailey, has taken over the responsibilities for this section. The continued policy, as Dr. Sugar states, "is to select current articles of significance and abstract them in length sufficient to be useful even without reading the original." Special attention is to be given to important articles in foreign journals. Sugar makes timely comment on the serious handicaps in communication between languages. One suggestion offered is that the National Library of Medicine in Washington, when newly housed, might establish a center for coding world literature that would in some degree reduce this handicap. Certainly the ability to read other languages beside one's own should be a required feature of medical education.

The editor notes that the past year has shown particular interest in "surgery of involuntary movements, vascular lesions, hypothermia, ultrasound and whiplash injuries of the cervical spine. There is a notable decline in interest in sympathectomy for hypertension and Raynaud's disease, operations on the eighth nerve for Ménière's syndrome and lobotomy for mental diseases."

Mackay introducing the section on neurology emphasizes the necessity not only of cultivating clinical neurology but of stimulating basic anatomic and physiologic research for the benefit of psychiatry as well as neurology, and in line with the truism: "no psychosis without neurosis." Such investigations embrace the whole range of neurologic function "from sensory nerve endings to muscle contraction, and in particular deal with the organization of sensory data and the formulation of behavior."

In this context the editor calls attention to the work of D. C. Sinclair of Oxford "which destroys much of the doctrine of specific energy" in the transmission of sensory impulses.

Again, the experience, or reported experience of pain is of "such complexity as all but to defy analysis." It is comprehensively dealt with, "from anatomy to philosophy" in a French symposium edited by Alajouanine (*La Douleur et les Douleurs* Paris. Masson et Cie, 1957).

While the last word concerning immunity against polio by means of vaccines has not been spoken, Mackay sums up: "At present there is no doubt that the Salk vaccine, properly given, confers a great and effective immunity, without significant hazard. Thus a victory over poliomyelitis is confidently expected, if only the vaccination of the population en masse can be accomplished."

Familial multiple sclerosis is dealt with in a remarkable report by a Swedish observer, Bengt Estborn, who describes 40 illustrative families, one striking example being the occurrence of the disease in 2 sisters, 1 brother, the mother and an uncle.

Concentrating on the gaps in our knowledge of the relationships between convulsive disorders and the EEG, Mackay remarks that probably "when all this is learned, we shall discover that all epilepsy is one, that all persons are capable of having seizures and differ from one another in this regard only in their degree of readiness ('threshold') for the process, that so-called etiologic factors are only trigger mechanisms, and that the types of seizures are determined solely by the locus of the discharging lesion."

In the section on psychiatry Bernard Wortis notes

the extraordinary swing to psychopharmacology in the treatment of mental disease. The ataraxics (tranquilizers) now top the list of therapeutic agents, and in many institutions have contributed notably to the solution of the overcrowding problem. Much needed studies in the differential evaluation of these drugs in their numerous modifications and combinations are also reported and the need for further research and controls emphasized.

The mental disorder of the year has undoubtedly been schizophrenia, which is more often spoken of in the plural than the singular, or better still as a schizophrenic reaction. This category has received more attention than any other psychotic group, from the standpoints of nosology, treatment, and research. Wortis calls attention to the work of Heath who reported schizophrenic-like reactions in humans by administration of a substance (taraxein) extracted from the serum of schizophrenic patients. Another experimental study by Akerfeldt of Sweden, which may be of diagnostic value, showed a high frequency of positive serological reaction in schizophrenic patients to the dye N.N. Dimethylphrenyline. These and other experimental studies require further extension.

Among the most important research reports of the year were those in the genetic symposium at the annual meeting of The American Psychiatric Association. They were those on "Genetic Principles in Human Populations" by H. J. Muller, "The Molecular Basis of Genetics" by Linus Pauling, and "The Genetics of Human Behavior" by Franz J. Kallman (All in Am. J. Psychiat. Jan. 1956).

A feature of Wortis' introductory remarks is a series of fairly long selected bibliographies covering drug studies and the various other departments of psychiatric inquiry.

The division of the Year Book on neurology and neurosurgery is illustrated. As usual the volume offers a good representative coverage of the fields dealt with.

C. B. F.

TABOO. By *Franz Steiner*. With an Introduction by *E. E. Evans-Pritchard*. (New York: Philosophical Library, 1956. pp. 154.)

In *Totem and Tabu* Freud provided the most brilliant analysis of the meaning of taboo that anyone has ever written. *Totem and Tabu* is often dismissed as a "just-so" story, and, perhaps, for the most part it is. But what is sometimes forgotten is that it contains some of the most exciting examinations of the nature and function of certain psychiatrically and anthropologically interesting ideas to be found anywhere in the literature. Among these ideas is that of *taboo*. Freud is extremely illuminating on this subject, but it has remained for the late Franz Steiner to write by far the soundest study of this belief that we have.

Following a critical examination of the relevant literature and theoretical writings which have been devoted to the study of taboo, Steiner brings his own brilliant analysis of its meaning and significance to a successful conclusion, making the double function of taboo crystal clear. That double function is first, the identification and classification of transgressions, and second, the institutional localization of danger.

This is a first-rate book of great value to all students of the human mind. The death of the author in the autumn of 1952 at the early age of 43 robbed anthropology in particular and the social sciences generally of a distinguished contributor. This book will serve to keep his memory green as long as the interest in this subject endures.

M. F. ASHLEY MONTAGUE, PH. D.,
Princeton, N. J.

CURRENT THERAPY 1957. Edited by *Howard F. Conn, M.D.* (Philadelphia: W. B. Saunders Co., 1957, $11.00.)

The latest edition of Current Therapy has been carefully prepared as usual.

The policy of having many new contributors to each year's volume has the effect of maintaining freshness for the reader as well as giving a wide opinion in the subjects.

The editors and consultants wisely make the point that no treatment should be considered unless the diagnosis is clear and a book on therapy alone will not appear to minimize that tremendous problem. Many of the contributors, therefore, have written a preamble to their particular subject stating the principles of diagnosis and the fundamentals on which therapy must be based.

Good examples are the article on Hypertension by Horace Smith, that on Neurocirculatory Asthenia by Donald Ross, and that on Pernicious Vomiting of Pregnancy by Nicholson Eastman.

This edition keeps up the standard to which Dr. Conn and his associates have aspired from the beginning. There is a full list of the normal laboratory values of each subject and a good index. The publishing is as good as ever.

A book of this kind cannot be "reviewed" in the ordinary sense. One can only ask the questions: is its object a sensible one: does it achieve its object? To these one feels that the answer is "Yes."

TREVOR OWEN, M. D.,
Toronto, Canada

ATYPISCHE PSYCHOSEN. By *Bernhard Pauleikhoff*. Basel (Switzerland) and New York: S. Karger, 1957. pp. 141 Fasc. 99 of Bibliotheca Psychiatrica et Neurologica.

The author is interested in the presence or absence of a meaningful order (Sinngesetzlicheit) and/or of meaningful relationships (sinngestzliche Zusammenhaenge) in experiencing. He is of the opinion that it depends essentially on 4 factors whether and how far the experiential structure of a personality is meaningful, namely on 1) constitutional factors, 2) the age, 3) the past experiencing and 4) on the situation. He attempts to show that the meaningful order is important in differential diagnosis. He illustrates his thesis with 14 histories of atypical cases: the differential diag-

noses between psychopathy and (schizophrenic) psychosis; between psychosis on a physical basis (brain tumors) and schizophrenic or manic-depressive (cyclothymic) disorders; between atypical psychotic pictures and possible brain changes. He adds cases in which the distinction between schizophrenic and cyclothymic psychosis is not safe. The author warns that the individual "cannot determine the situation completely, but has to adjust himself within limits to the situation." He assumes that the meaningful order in perception and thought is often disturbed in schizophrenia. In uncomplicated cyclothymic depressions, the meaningful relationship to the (structure of) the personality may be disturbed; delusions of guilt, impoverishment, hypochondriasis fit in meaningfully. Certain paranoid delusions (persecution) may make the differential diagnosis difficult or even impossible at least in cross-sections.

This is a very scrupulous piece of work in which the author used several statistical figures from material of the psychiatric-neurological clinic Heidelberg. He follows in most regards his teacher Kurt Schneider to whom the book is dedicated. It is not always easy to follow the author's trend of thought as he seems to have a certain predilection for complex formulations and complex words. This review might appear to him a not permissible simplification of his discussion. However, it is not so much what he expounds as the way in which he does it that lends a certain originality to his presentation. Nobody will deny that the "Sinnzusammenhang" can be a most helpful tool.

Dr. Pauleikhoff's review of the pertinent literature with which he begins his book is the more commendable as this is his first sentence: "The importance of Emil Kraepelin for psychiatry can scarcely be overestimated." (Die Bedeutung Emil Kraepelins fuer die Psychiatrie kann schwerlich ueberschaetzt werden.)

EUGEN KAHN, M. D.,
Houston, Tex.

EXPLORATIONS IN AWARENESS. By *J. Samuel Bois*, (New York: Harper and Brothers, 1957, pp. 334. $2.75.)

The author who is an important Canadian industrial psychologist and Past President of the Canadian Psychological Association has applied the theories of Alfred Korzybski to problems of business management. This little book represents many years experience and of course will prove useful, not only in executive training, but also for anybody who has to work with people, (and who doesn't?).

His format is much more easily followed than Korzybski's original *Science and Sanity* and the popular, frequently humorous, approach may well shock some of the stuffier 'disciples' of General Semantics. Its readability has however not detracted from the basic scientific thinking and the original ideas for application of the author. He carefully takes us through problems of verbal confusion, winding up with a program for guided awareness and methods of thinking and speaking more precisely—hence more lucidly. He has a final chapter comparing danger indicators of what we say, what we do, how we say it and how we do it, which should prove useful in helping us, as the author puts it, to 1) "stop wearing ourselves out or destroying ourselves by excessive bursts of energy; 2) keep functioning within an optimum range of efficiency; 3) adapt ourselves to shifting objectives and changing conditions."

If you are familiar with General Semantics this text will give you a different viewpoint. If you do not know Korzybski's work, this text is an exciting beginning.

DOUGLAS M. KELLEY, M. D.,
Berkeley, California.

UNDERSTANDING HUMAN BEHAVIOR. By *James L. McCartney, M. D.* (New York: Vantage Press, 1956. $3.50.)

The author states his goals as follows: "This book is an attempt to bring together what is known about human behavior and what can be done to help maladjusted individuals gain a healthier state of mind."

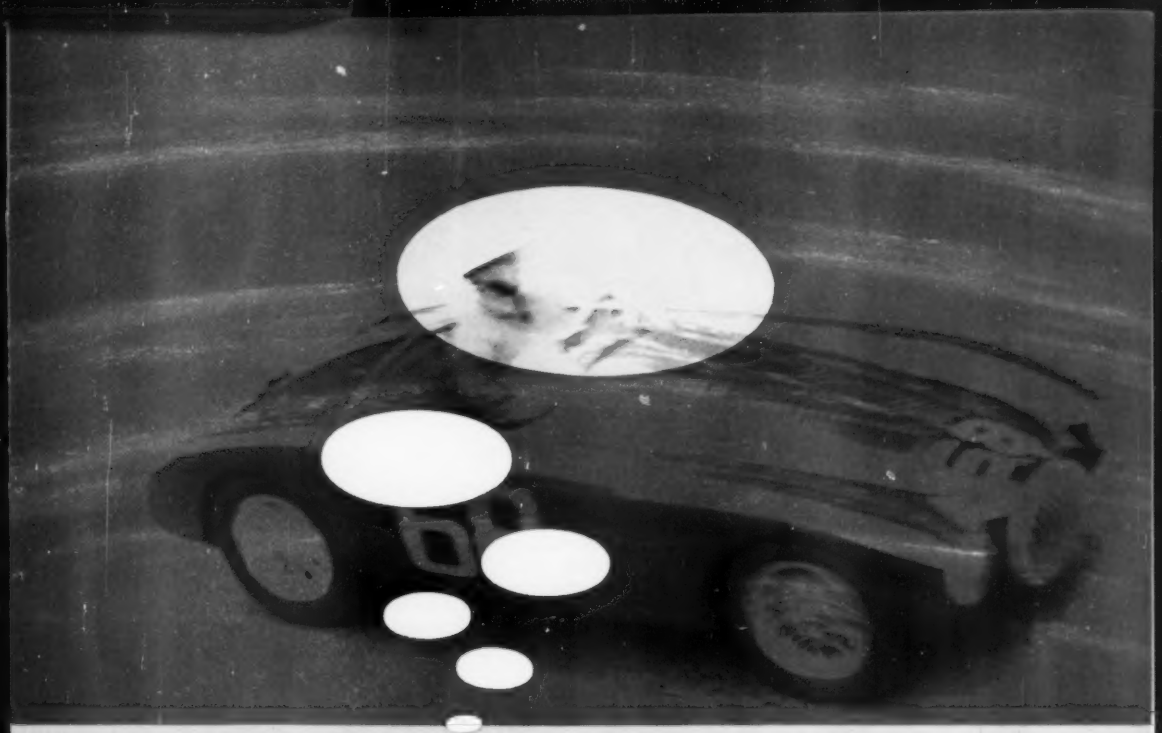
A little less than the first half of this 258-page volume is devoted to the normal personality and its various functions. The first chapter is on the integrated personality followed by 3 on frustration, guilt and dreams. His approach is multidimensional as he discusses heredity, congenital defects, the central nervous system, the endocrines, nutrition and psychological influences. The latter follows current genetic and dynamic concepts.

The remainder of the book is largely devoted to personality problems and their treatment. One chapter on diagnosis reproduces The American Psychiatric Association's standard nomenclature in full and gives percentages seen in hospital and private practice, as well as a discussion of the main diagnostic categories. The next chapter considers normal and aberrant sexual behavior. Therapy is discussed in chapters devoted to individual and group psychotherapy and to physical therapy. Dr. McCartney closes his book with a discourse on a philosophy for life. Throughout, he gives a large number of case illustrations which are refreshing in their brevity although occasionally they are so condensed as to be emasculated. A glossary of technical terms makes this book more useful to the average reader.

One can find fault with a number of details: intelligence is considered to be rigidly fixed at birth; the discussion of 47 instincts and their corresponding emotions; fear is the only perception in early life; bowel training is to be started at 6 months; the definition of transference as having confidence in the therapist, and the importance of the death instinct, etc. In its comprehensiveness, coverage often had to be superficial in certain areas, but a great amount of pertinent material has been brought together in a cohesive fashion.

On the whole, this book is a sound one and may safely be recommended to public libraries for the use of interested laymen.

ERIC T. CARLSON, M. D.,
Cornell University Medical College.



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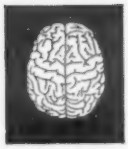

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2. Hutchinson, J. T.: Evaluation of Pacatal in Psychotic States, address before the American Psychiatric Association, Nov. 16, 1956.
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BENJAMIN KARPMAN, M. D.

Chief Psychotherapist
St. Elizabeths Hospital
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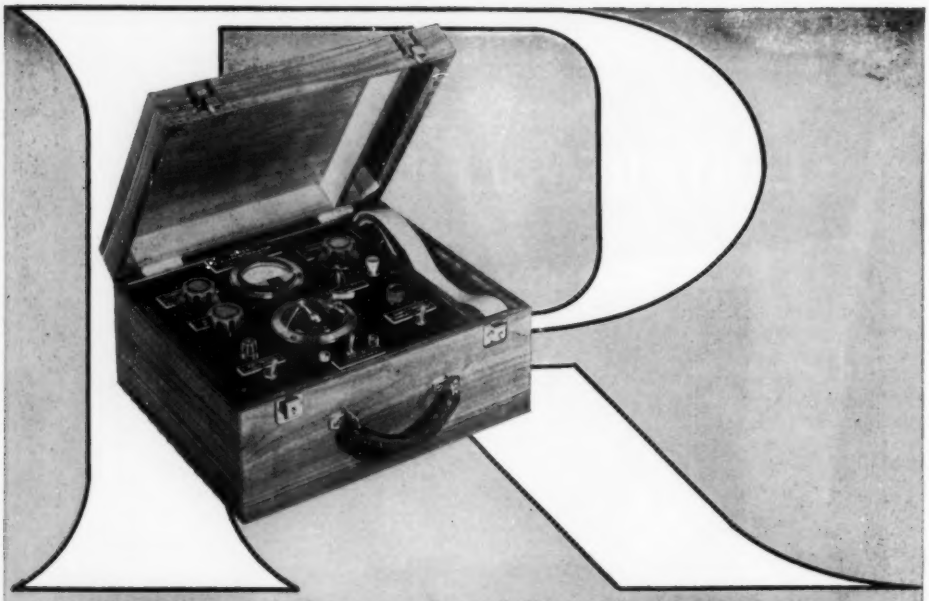

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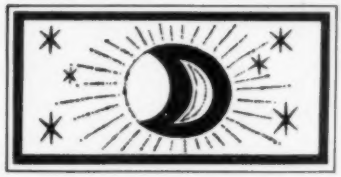

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The pretty young woman in the smart flying costume (she'd designed it herself—"bloomers, blouse, and hood of mauve satin") glanced at her compass. It was the first time she'd ever used one. She thought of instructor Hamel's parting words:

"Be sure to keep on course, Miss Quimby, for if you get five miles out of the way, you'll be over the North Sea, and you know what that means."

She climbed to 6,000 feet. Freezing cold and still fog.

She pointed her nose down. The comforting clatter of the Gnome engine changed to a coughing splutter. It was conking out! She leveled off, figuring how she'd ditch. To her relief, the engine suddenly took hold. Harriet re-checked her compass.

Some time later, breaking into clear sky, she saw a stretch of beach below. She put down at Hardelot: and on April 16, 1912, Harriet Quimby, first American woman to earn a pilot's license, became the first woman in the world to fly the English Channel.

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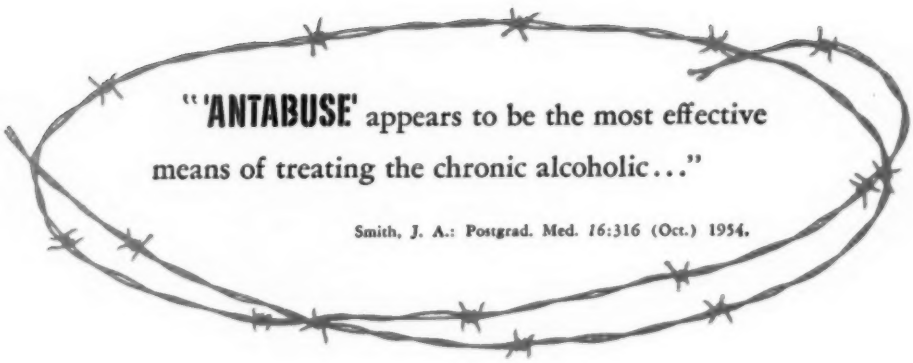

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